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ABSTRACT

The implementation and effectiveness of the inclusion of literacy and numeracy in industry training packages was examined in case studies of three programs in Western Australia. Two were certificate programs in cooking and food and beverage as specified in the hospitality training package, and the third was an aged care program based on the community services training package. Training providers at the sites were interviewed about the following issues: how they address the language, literacy, and numeracy requirements of the competency standards governing their programs; how they assess students' mastery of the competencies; and how existing training and assessment practices can be improved. The following were among the main findings: (1) all staff interviewed were aware of the importance of language, literacy, and numeracy training and believed that the training packages' references to the said skills were not explicit enough; (2) concern

was expressed over the frustrations that students with poor literacy skills experience when using the training packages; and (3) trainers were generally pleased with training packages' emphasis on self-paced, flexibly delivered learning. The trainers also identified numerous funding issues and called for more articulation to postsecondary education and more professional development activities. (The questions asked of training providers are appended.) (MN)

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Case studies in Aged Care and Hospitality

Christine Haines & Jennie Bickmore Brand

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Western Australian Centre of ALNARC
Teaching and Learning Centre
Murdoch University

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Contents

1	The Project	1
2	Background to the Project	3
3	Approach to the Project	5
4	The Case Studies	8
5	Issues, Attitudes and Practices	11
6	The Training System Response in Western Australia	21
7	Changes Suggested by Interviewees	25
8	Key Issues from the research	28
9	Recommendations	31
10	Concluding statement	32
11	Bibliography	33
	Appendix 1	34

1 The Project

The project has been designed to gather information on the ways in which the incorporation of English language, literacy and numeracy competencies into the competency standards of Training Packages is impacting upon language, literacy and numeracy skills training and assessment in the Vocational Education and Training sector. The aim of the project was to investigate the ways in which this initiative might impact on learning and work outcomes. The research was carried out during the early stage of take-up of English language, literacy and numeracy competencies by Registered Training Organisations (RTOs) in Western Australia. This report is based on three case studies of training delivery (by a metropolitan and two regional providers) in Aged Care and Hospitality. It describes the changes in work cultures that are evolving as RTOs take on board not only training packages, but the English language, literacy and numeracy competencies embedded within industry competencies.

The research has found that language, literacy and numeracy competencies lack visibility in training packages. Response to literacy and numeracy needs is affected by changes in the workplace cultures. For example the roles and responsibilities of trade, literacy and communication skills teachers are being redefined in ways that might affect delivery, workloads and student contact hours.

This project was one of a number of complementary research projects carried out by State Centres of the Adult Literacy and Numeracy Australian Research Consortium (ALNARC) in 1999. The focus on English language, literacy and numeracy in National Training Packages was commissioned by the Australian National Training Authority (ANTA) and the Department of Education, Training and Youth Affairs (DETYA). It provides an opportunity to highlight current and potential difficulties and to suggest adjustments to ensure that language, literacy and numeracy skills development and related assessment issues are not overlooked as the packages are progressively implemented

The Western Australian project was conducted by Christine Haines of Miles Morgan Pty Ltd in consultation with a project reference group. Jennie Bickmore-Brand, director of the WA ALNARC, edited the original report.

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2 Background to the Project

As part of the Federal Training Reform agendas of the late 80s and early 90s there has been a move toward competency based training and a national consistency of standards. Training packages have been subsequently developed to include nationally endorsed components on standards and assessment guidelines and qualifications and non-endorsed components relating to learning strategies and materials. There is growing recognition that the language, literacy and numeracy requirements of many occupations are increasing and that this needs to be addressed in industry training. Acknowledging this, Commonwealth, State and Territory Ministers for Vocational Education and Training agreed, in 1995, that English language, literacy and numeracy competencies would be incorporated into competency standards. It was hoped that this would result in language, literacy and numeracy workplace provision being recognised as an essential part of training provision, rather than a marginalised activity.

The development of National Training Packages, a key feature of the new National Training Framework within which all vocational education training and assessment will occur in future, provided the means by which this policy decision was implemented. National Training Packages also provided a framework for the revision or development of industry-specific competency standards by Industry Training Advisory Boards (ITABs).

Each training package provides an integrated set of nationally endorsed competency standards, assessment guidelines and qualifications for a specific industry, industry sector or enterprise. The packages are progressively being developed by ITABs for all industry sectors, with about 35 Packages having been endorsed at the time of undertaking research for this project.

In future, people will be assessed against these packaged competency standards in order to gain a qualification that is recognised throughout Australia. In addition to packaged Competency Standards and qualifications that relate to the Australian Qualifications Framework (AQF), the Packages also contain Assessment Guidelines that include requirements and guidance on how to assess people's competence. There are also published resources related to industry training packages. These

may include advice about learning strategies, assessment resources and professional development materials.

Training providers throughout Australia are shifting their operations in order to offer qualifications contained within training packages. Where the shift has been made, implementation is in its infancy. Hence it is difficult to reach any firm conclusions about the likely learning outcomes for students. However, this research, using a case study approach, has enabled the documentation of various stakeholders in this implementation process as it listened to people's concerns and experiences at this early stage.

The identification of broader issues related to the 'adequacy' of the specification of language, literacy and numeracy within the packages themselves and associated issues such as funding, could be considered in the forthcoming Review of Training Packages to be conducted by ANTA.

3 Approach to the Project

Initial discussions with members of the Reference Group and the Western Australian Department of Training and Employment, indicated that the greatest scope for consultation on these issues, was likely to be with training providers working in the areas of Aged Care and Hospitality. It was in these areas that some considerable progress had been made with using the training packages as the framework for delivery and assessment.

Three Registered Training Organisations (RTOs) that are using the training packages were identified as potential sites for a close examination of how language, literacy and numeracy skills are being taught and assessed.

Preliminary phone discussions were held with nominated RTOs to determine the stage of implementation of the package, the qualifications being offered and the numbers of students involved and to determine whether these organisations were willing to participate in the project. While it was originally hoped that one of the sites might include that of a private training provider, this was not possible within the time frame of the research.

Field visits were organised to one metropolitan and two regional Registered Training Organisations (RTOs). Teaching staff with experience of implementing the training packages were identified at each site and interviews scheduled.

While the focus was on staff from Aged Care and Hospitality, staff from other technical areas and Communications, Literacy and Numeracy lecturers were also invited to make comment on the following issues:

- How has the inclusion of language, literacy and numeracy competencies affected the visibility of language and literacy issues?
- Is there a shift in who teaches what and how?
- Has the training package model provided more opportunities for providing contextualised literacy?
- Are the relationships between communication teachers and trade skills teachers changing as a result of the use of training packages?
- Are staff able to identify the language, literacy and numeracy requirements in the standards?

- Can any comparisons be drawn yet between what is happening in the new system and what used to happen under the old system, with a particular focus on the impact for students?
- Are there any large variations in the 'time' allocated to the development of language, literacy and numeracy skills under the new system?

Structured questions were developed to guide the discussions with lecturers and are included at Appendix 1. It should be said, however, that because of the early stage of implementation of the training packages, the time and attention that had been paid to language, literacy and numeracy issues varied considerably, and so the questions were not always an appropriate vehicle for eliciting people's views. A less structured approach was adopted and the issues raised in this paper, therefore, come essentially from people's opinions, 'anecdotes' and experiences.

3.1 The training packages

The ways in which language, literacy and numeracy competencies are included in National Training Packages varies between industries and between units within a set of standards because there is no required format for their inclusion. The demands of occupations and industry sectors vary considerably. For example in the Metals area there is a greater requirement for numeracy skills than in the Community Services area where communication skills are critical.

A four-step process has been suggested by ANTA whereby training package developers are encouraged to:

- Gather information about language, literacy and numeracy activities.
- Identify the language, literacy and numeracy required to achieve competency.
- Determine the centrality of language, literacy and numeracy activities to workplace tasks.
- Include language, literacy and numeracy competencies in the standard format.

A number of options for inclusion were available to package developers. For example language, literacy and numeracy competencies could be included as:

- a whole unit relating to workplace communication skills;
- an element containing language, literacy and numeracy skills;

- separate performance criteria covering language, literacy and numeracy skills; or
- the Range of Variables and Evidence Guide statements could refer to language, literacy and numeracy skills.

The Community Services and Hospitality Training Packages were examined to identify the ways in which language, literacy and numeracy activities had been included.

In the case of the competencies being developed using the Hospitality Training Package (both in Cooking and in Food and Beverage), language, literacy and numeracy skills were primarily specified as underpinning skills and knowledge and were related to Mayer Key Competencies which include communication and maths competencies.

The core competencies for Community Services and the electives for Aged Care are also linked to the Mayer Key Competencies. The language, literacy and numeracy requirements were more visible in the Community Services Package. Generally speaking they were integrated into the performance criteria of the standards, and specified in the Range statements and Evidence guide.

Staff working with this package indicated, however, that they felt they had to 'delve' in order to 'find' the language, literacy and numeracy requirements.

4 The Case Studies

4.1 Case study 1

Certificate programs (in Cooking and Food and Beverage) as specified in the training package have been offered by this RTO (hereafter referred to as RTO 1) since the beginning of the 1999 Academic Year. Therefore, the experience of Hospitality lecturers and students in these programs was sought.

The RTO is also known for its active literacy and numeracy program, and for the last two to three years had worked closely with the Adult Literacy Services Bureau of the Western Australian Department of Training and Employment to develop an integrated model of literacy and numeracy support in trade areas such as Metals and Building and Construction, where 65% of students were identified as needing help.

RTO 1 is also in the process of creating a formal policy on literacy and has won the tender to develop a Curriculum Framework for integrated literacy support (a course called Applied Vocational Study Skills) on behalf of the Access and Participation Directorate of the WA Department of Training and Employment.

In this case study, therefore, there was a strong focus on the experiences of Communications lecturers who have traditionally provided literacy and numeracy skills development and assessment support to technical staff and students.

4.2 Case study 2

Certificate programs (in Cooking and Food and Beverage) as specified in the Hospitality Training Package have been offered by RTO 2 since the beginning of the 1999 Academic Year. Approximately 40 students are studying under the training package framework.

Staff from the Hospitality area 'hosted' the field visit and were the major focus of this case study. However, lecturers from the Mining area, where there is a strong focus on on-the-job training, were also consulted, as were Communications lecturers who had traditionally provided stand-alone communications modules under the old curriculum framework.

4.3 Case study 3

The Aged Care area within the Centre for Human Services of RTO 3 offers Certificate programs in Aged Care using the Community Services Training Package.

In an effort to come to terms with the changes required for effective training package implementation, instructors from the Aged Care area, along with lecturers in the areas of Disability, Youth, and Community Work undertook a Framing the Future Project.

The purpose of their project was to develop assessment strategies that took into account the range of ways that students could be assessed with the introduction of the Aged Care Training Package.

RTO 3 has also worked with a large Western Australian employer of aged carers to develop a literacy and numeracy assessment tool to be used with existing workers. This tool, which was primarily designed to determine whether workers had the necessary literacy and numeracy skills to perform their duties effectively and safely, was aligned with the requirements of the new training package.

4.4 Preparing for implementation

There was considerable variation in the amount of attention each of the three providers paid to language, literacy and numeracy requirements in their planning for implementation of the training packages. There were a number of factors which may have contributed to these differences, but it was interesting to note that where there had been extensive staff development, there had also been greater attention paid to language, literacy and numeracy requirements and the development of appropriate learning strategies and assessment tasks.

In order to help people in the field understand and use training packages the ANTA Framing the Future initiative provides limited funds for staff development projects that use work based learning methods.

Human Services staff of RTO 3 had been part of a Framing the Future Project that focused on developing assessment procedures in 1998. The Human Services Program Manager and the Principal Lecturer played key management and adviser roles in the project providing advice, direction and assistance to participants. An ANTA report on the project attributes the high level of motivation and enthusiasm of staff to the strength of management involvement in the project.

At the same time, the facilitator of a Workplace English Language

and Literacy (WELL) Program for employees of a major provider of aged care in Western Australia was developing an assessment tool to determine whether carers in their employ met minimum workplace literacy requirements. This was prompted by a need to ensure that the organisation met its duty of care responsibilities. Staff from the Central Metropolitan College of TAFE provided input into the development of the assessment tool so that the competencies it measured aligned with the competencies required by training package units. This meant that language, literacy and numeracy activities were in sharp focus for this RTO.

Being part of a Framing the Future staff development initiative also 'bought' preparation time for staff in this area, whereas in the other case studies one of the greatest impediments to planning to meet language, literacy and numeracy requirements was seen to be the lack of time. The shift from curriculum to training packages was seen to be a major shift for lecturers and yet little additional time was available to prepare for it.

It was like walking into a dark room. We didn't spend time mapping language, literacy and numeracy competencies. We were still trying to shift the mindset of uncertain, resistant lecturers who are not convinced that the new system will improve training outcomes.

There was, however, an awareness of the need to refine early practices, and to develop strategies for dealing with language, literacy and numeracy. They had simply not been an initial priority.

It should also be noted that ANTA has funded the national Industry Training Advisory Board, Tourism Training Australia (TTA), to conduct research with a view to future refinement of the packages. TTA has indicated that they will seek feedback on whether the standards adequately deal with language, literacy and numeracy competencies.

5 Issues, Attitudes and Practices

5.1 A belief that language literacy and numeracy had been 'buried' in the Packages

All staff interviewed were aware of the importance of language, literacy and numeracy training and considered that references to language, literacy and numeracy skills had not been explicit enough in their industry's training package.

Vocational lecturers have always been aware that some students, even those who are very competent in their hands-on skills and have a sound understanding of important vocational issues, will struggle or fail because they do not have underpinning language, literacy and numeracy competencies.

We've dealt with language, literacy and numeracy in certain units, because we believe they need to be there, like other underpinning knowledge, but you could leave them out.

Where training packages do not make these requirements explicit, there can be continued silence on the issue. People can choose to remain blind to the issue. This is particularly so at this stage of their implementation where for some lecturers, dealing with reading and writing is just another imposition.

Lecturers also said that language, literacy and numeracy needs had never been adequately addressed in a systematic way across all 'departments' of training institutions. While there is a downsizing of general studies areas currently, at some campuses there have not been specialist skills to call on.

While our approach was lacking in the past, at least there were modules dedicated to the development of communication and math skills. That is no longer the case.

Lecturers with particular expertise in these areas felt that the training packages assumed that the developmental processes that underpin the acquisition of language, literacy and numeracy skills would just rub off on to people.

On the other hand, some lecturers from technical/trade areas welcomed the incorporation of language, literacy and numeracy requirements into the package because they considered that the development of these skills in an industry-specific context offered a real

opportunity for students to see their relevance.

The linkage is an excellent feature because in the past kids didn't see the relevance. Even workplace communication units of competence will be picked up by technical staff. This is not a bad thing because in the past many communications lecturers couldn't relate the learning to the workplace for students.

5.2 Identification of students having difficulties with language, literacy and numeracy skills.

It was frequently reported that people with difficulties with language, literacy and numeracy often don't make it clear because they are embarrassed by their difficulties and have learnt to compensate for them. Younger students often don't see the need to pay attention to literacy and numeracy until they move along their career path. Very often they have chosen the occupation because it involves highly practical skills.

In fact, theory predominates at the earlier levels and the literacy and numeracy demands are quite heavy. By the time students get to Certificate III level, the ratio between practical and theoretical skills development has swung in favour of the practical.

Technical staff in trade areas sometimes don't have the skills to identify those having difficulties and because of what has been described as the 'tribal culture' of many training organisations, many lecturers often don't even know who to go to in order to deal with such concerns. This is particularly the case with sessional staff.

5.3 What happens to students who have difficulties with language, literacy and numeracy competencies?

Lecturers were aware that students whose language, literacy and numeracy competencies required further development often became frustrated and dropped out of study programs.

In those cases where lecturers attempted to attend to the difficulties of students, the responses were individual and isolated rather than systematic. While this clearly was beneficial for students, it certainly was not evidence that training organisations are responding in systematic ways as a result of the inclusion of language, literacy and numeracy competencies in training packages.

The response of RTO 1, which had an active team of Communications staff, was to have the technical/trade lecturers work with

specialist staff to assist the student, in the form of extra classes or one-on-one tuition.

Funding comes out of the 'access' budget because we have no funding mechanism we can apply.

In the case of RTO 3, there was a part-time support person whom students could be referred to for a range of personal and learning issues, but whose availability was fairly limited.

Suitable learning materials/workbooks.

As mentioned earlier in the report, RTO 3 is regarded as a leader in training package implementation in the field of Aged Care. They started preparing for implementation 12 months prior to endorsement of their Package and are producing learning guides, and developing assessment tools.

Staff from the area felt that the non-endorsed components of training packages they had developed had not been adequately scrutinised to ensure that the reading skills required to be able to use the resources were closely aligned to the language, literacy and numeracy requirements of the unit of competence they related to.

The non-endorsed components for Children's Services (Community Services Training Package) produced by SA and WA are highly text focussed and it was felt that there had been little initial assessment of the language, literacy and numeracy skills required by the learning materials. Once again, simply by chance they have a literacy expert on staff who could provide input to the process. Without such fortuitous circumstances the materials could inadvertently create a barrier for students.

A significant impediment to ensuring that the language, literacy and numeracy levels of the materials matched the requirements of the unit of competence was said to be the level of funding made available. However, it was also thought that ignorance of the importance of language, literacy and numeracy competence was an equally significant impediment.

It should also be noted that there was little evidence that many staff were aware of any industry specific resources that have been developed through the Workplace Communication project managed by ANTA with funding from DETYA. Nor were they aware of professional development kits designed for workplace trainers and assessors that provide strategies for identifying language, literacy and numeracy skills required for workplace training and assessment.

The new National Training Framework emphasises assessment based on on-the-job performance, thereby shifting the focus from the

training component to assessment. While assessment has always been important, with the introduction of multiple pathways including assessment only pathways, “credentials are much more closely linked to assessment against the standards, rather than the completion of a training program” (DETYA, 1999, p 20).

Assessment needs to be planned to ensure that it is valid, fair, reliable and flexible. In particular, the reading and writing demands of assessment need to align with the demands of the unit of competence they are assessing. For example, it is really important that where written tests are used they do not demand higher reading, writing or numeracy skills than the level in the standard they are designed to assess.

Where possible, consideration needs to be given to modifying the assessment materials to suit candidates with particular communication skills difficulties. The case studies showed that lecturers were aware of the importance of setting up flexible assessment processes and were used to offering reasonable adjustment (predominantly by using oral rather than written assessment techniques) to meet the special needs of individual students

5.4 Leadership

There is a concern that without leadership in, expert knowledge of and a systematic approach to language, literacy and numeracy, attention to language, literacy and numeracy will vary considerably between providers. Such factors as the size of the institution and the skills and attitudes of the staff are likely to impact significantly on the extent to which these issues are addressed.

Some technical staff may have been exposed and have some background but it's highly unlikely that they will live and breathe literacy.

The case studies and discussions with other staff working in the language, literacy and numeracy fields illustrated this. All staff were aware that these skills were critical to students, and that many students dropped out because they were unable to meet the language, literacy and numeracy demands of particular programs of study. However, it was only where there were staff with a strong interest and background in skills development in these areas, that language, literacy and numeracy requirements were being addressed. And even then, in the absence of strong leadership which could translate this willingness into making resources available, they were being addressed in ways which staff themselves considered to be less than satisfactory.

It is fairly obvious that without strong leadership in the language, literacy and numeracy areas, the extent to which the development and assessment of these skills receive attention is heavily dependent on the background, interests and skills of the lecturers. As language and literacy skills become integrated into mainstream training programs, without strong leadership there is a risk that training will be adhoc and accidental.

5.5 The impact of the shift to self paced, flexibly delivered learning

A key feature of National Training Packages is the greater choice that they afford clients. While user choice arrangements vary from State to State, the packages offer clients the opportunity to negotiate with training providers on the selection and sequencing of competencies and the timing, location and mode of delivery.

With respect to this set of case studies there was little or no customisation being carried out. However, it is likely that employers and employees will start to exercise the choice that is available to them as they become more familiar with the packages.

Class sizes will be affected, as students within study areas will increasingly be engaged in developing different (often enterprise-specific) competencies. RTOs are already using flexible delivery options for on-campus students and it is likely that this delivery mode will become an increasingly common response as clients are offered greater choice in the units of competence they can enrol in.

In this environment, paying attention to the literacy and numeracy skills of clients will become even more critical, because print and computer-based learning resources and assessment tools will increasingly be used.

Flexibly-delivered training requires high quality learning materials and it will be critical that the levels of language and literacy competence required to use the training materials matches the levels required in the unit of competence itself. It is important that those writing the materials do not over-estimate the skill levels of the trainee/workers.

While staff are aware of these issues, training materials used in structured classes had not been examined routinely from this perspective, except in those cases where language, literacy and numeracy specialists were offering support on a one-on-one basis to students.

In the past, where funding has been allocated through industry specific tendering processes to language, literacy and numeracy

requirements, specialised literacy staff have been called on to examine training materials and to be involved in some cases in delivery and assessment. Their services were not called upon as study areas prepared for implementation of training packages.

5.6 The capacity of lecturing staff to deal with the changes associated with the introduction of National Training Packages

Clearly, it takes time for new approaches to training to become understood and embedded. In all locations, it was reported that not all lecturers are yet fully aware of the big shifts that are happening as a result of the new pathways to gaining qualifications.

Even language, literacy and numeracy specialists are not keeping up to date and it's hard for them to make the shift required by training packages.

Program managers at the industry level who are responsible for ensuring that language literacy and numeracy requirements are understood and met by staff within their areas, often do not have the necessary expertise.

They are making a huge shift and in the main have no developmental theory themselves as an underpinning knowledge.

Many staff were aware that the competency standards within their package were aligned to the Mayer Key Competencies. However, some staff admitted that they really didn't have a clear understanding of the differences between the Mayer levels of competency. Nor were they aware of where to go for assistance to interpret these requirements.

You are meant to know.

At another site it was said that some technical/trade lecturers were aware of their own language and literacy shortfalls.

They keep quiet because they are uncomfortable. This doesn't mean that they don't try to help, but kids are probably not getting the most appropriate help.

At another case study site, it was reported that in the particular study area assessment/learning strategies involved reflective practices. Lecturers weren't getting what they wanted from students because they themselves could not model reflective practices. They weren't able to break up the overall requirements into quite specific communication skills.

On the other hand, there was significant variation in the extent to which language and literacy experts were actively marketing their expertise to provide language support to other Departments.

At one site, the Communications team were actively promoting their services. At another site it was said that,

I didn't think I'd have any clout. There has always been a clash between those with technical expertise, and those with 'softer' more general skills.

5.7 Funding

There are a range of funding issues associated with the mainstreaming of language, literacy and numeracy skills development and assessment.

Any activity that is seen as being marginal to the delivery profile of the training organisation is usually subject to very vulnerable funding. In the past, most efforts to deal with literacy and numeracy have come from 'special' funding sources such as, funding which is subject to competition through the industry specific tendering process, or from 'pilot program funding' provided from the Adult Literacy Bureau. There has been no direct, mainstream way within the current funding mechanisms for VET providers to provide literacy or numeracy support to mainstream VET students. Some TAFE Colleges have used a dual enrolment in the Certificate of General Education for Adults (CGEA) to offer support 'in situ' for vocational students.

There has been no provision for the additional requirements brought about by the building in of language, literacy and numeracy requirements into units of competence in the unit cost of training provision.

Many people believe that that the outcome will be that students will not receive any literacy support. If there is funding for one teacher then the human resources simply won't stretch any further. The ideal of an integrated, team approach is not possible under current arrangements. There is a need for additional funding if lecturers with specialist language, literacy and numeracy skills are going to be brought into the program areas.

Fund me to buy the skills of language, literacy and numeracy specialists. By working alongside these experts, technical staff will have an opportunity to develop greater understanding and awareness of the importance of language, literacy and numeracy.

Internal competition for funds and for claiming student outcomes also impacts upon training delivery. For example program managers seem

reluctant to pay for the services of lecturers from outside their area, when the student outputs associated with the expenditure are allocated to another area.

So we try to choose electives from our functional areas. When it comes down to it, the question becomes who gets the Student Contact Hours? It's all about maintaining power and employment for those in your area.

In addition, the issue of available time (which is essentially a funding issue) was raised. It was a common cry of lecturers that they had no capacity to consider literacy and numeracy because the nominal hours for the development of units of competence had been significantly reduced with the advent of training packages. This was despite the intended focus on outcomes rather than student contact hours.

There was a view that generally speaking, 'theory time' is restricted and there was little time to allocate to the development of underpinning knowledge and skills.

If you have to deal with language, literacy and numeracy as well, you would miss out on hours needed to deal with the technical skills. As it is you are juggling to fit in essential technical skills development.

The capacity to deal flexibly with people's individual needs is also essentially a funding issue.

Despite the rhetoric, there is an assumption that everyone is at the same level. Regardless of people's capacity to progress, the funding implies that you have, for example, 40 hours to develop the competence. We continue to believe that we are satisfying the 'average' learner and the funding certainly assumes that.

5.8 Module load output rate

The introduction of the module load output rate in Western Australia, where all providers are required to meet output targets, has raised a number of concerns for training providers who are concerned that this will impact negatively upon the quality of assessment.

RTOs will be scrambling to lift their targets and there will be strong incentives to let people through.

There were concerns that if insufficient attention is paid to identifying and developing language, literacy and numeracy competencies in the learning strategy, then it is probable that people without these

competencies might gain technical competence without having the necessary underpinning language and literacy skills.

It's human nature. If you don't lift the module output rate, you run the risk of losing your job.

On the other hand, and on a more positive note, lecturers from the Communications area saw the introduction of such targets as providing a lever which would encourage technical/trade areas to 'buy in' the services of those with language, literacy and numeracy expertise.

We can make a difference. By attending to the language, literacy and numeracy skills of students, we can help other areas to lift their module load output rate.

5.9 Articulation to tertiary education

With the incorporation of language, literacy and numeracy competencies into industry competencies, and particularly in those cases where there are not whole units of competence dedicated to workplace communication, there are concerns that students will 'slip' through the VET sector in the same way they have 'slipped' through the schools sector.

This is seen to be an area of particular concern for those students who have an expectation that their qualification will enable them to articulate to tertiary education qualifications. At one site, concerns were expressed that students doing a Certificate IV program that logically led on to a degree program, would not have the necessary English competence.

The pathway into higher education will simply not be there for them. They will fail at tertiary level without essay writing and study skills, and yet the Certificate program doesn't give them that foundation.

5.10 Professional development

As mentioned earlier in the report, the focused industry-specific professional development activities associated with the introduction of training packages at the site of RTO 3 were seen to have contributed significantly to the motivation and enthusiasm of staff. They felt confident they had all the necessary information, that they understood why the changes were relevant, as well as having some time to consider the implications of implementation, including language literacy and numeracy requirements.

At other sites, it was reported that there had been no focus on

language, literacy and numeracy in professional development activities.

We haven't talked about it in our own team meetings, nor have we been very proactive.

Additionally, it was pointed out that in those study areas where there is a high proportion of part time/sessional staff, the likelihood of staff being involved in the professional development associated with implementation is even further reduced.

5.11 Assessing the skills of existing workers

As technology impacts upon the way we work, and as organisations are increasingly required to be accountable for the goods and services they offer, employers increasingly need to be certain that their employees have the necessary language, literacy and numeracy skills to do their job safely and effectively. In many industry sectors language and numeracy skills issues are critical to meeting duty of care responsibilities and occupational health and safety requirements. At the same time, the pathways to gaining a qualification are being expanded to include assessment of skills gained through on-the-job experience.

There are concerns that many older employees who are good at the job, will 'battle' to meet literacy and numeracy skill requirements, if they are to have be assessed in the skills they gained through workplace experience. Many of these workers are technically expert, but are really uncomfortable about the 'paperwork', and have learnt to compensate for their language, literacy or numeracy weaknesses.

Where skill gaps are identified through skills recognition processes, it will be critical that employers, assessors, and training providers are aware of the ways in which language, literacy and numeracy experts are able to provide sensitive and appropriate assistance and that adequate resources are allocated for the purpose.

6 The Training System Response in Western Australia

Over recent years, the WA Department of Training and Employment has funded a number of initiatives to address literacy issues, including a series of trials to test models of how literacy and numeracy support might be integrated within the delivery of vocational training.

These trials demonstrated that one of the most important factors in meeting the literacy, numeracy and English language needs of students in vocational courses was by ensuring that the literacy support was wholly relevant to the actual industry and study needs of the students. There was no support for learning literacy, numeracy and language competencies that did not directly and clearly underpin what the student was learning in the course, or would be doing in the job. The trials demonstrated that the most successful approach is to integrate literacy and industry competencies.

Team teaching, with the language expert working alongside the industry expert in the Metals and Construction areas has been a successful model previously used at one site. This approach has particular relevance as National Training Packages are introduced and technical/trade staff become increasingly responsible for language, literacy and numeracy skills development. This model also offers opportunities to develop the skills of technical/trade lecturers, who have not had any experience of developing or assessing language, literacy and numeracy competencies.

At another site, a pre-vocational access course for people with 'marginal' literacy and numeracy skills had been developed to provide a pathway into the Certificate of Geoscience Field Techniques and subsequently into employment in the minerals exploration industry.

It was seen to be a workable model because of its strong industry focus. It holds the interests of the participants because it uses industry-specific activities such as map reading and navigation to develop language, literacy and numeracy skills.

It takes away the usual embarrassment of people with basic literacy and numeracy skills because from day one, students are enrolled in Mining and Geoscience. It is delivered within the Department and the kids see a pathway for themselves.

6.1 A curriculum framework for integrated literacy support

A curriculum framework for integrated literacy support is currently being developed in Western Australia and will be piloted at a number of locations next year.

Funded by the Access and Participation Directorate of the WA Department of Training and Employment, the framework grew from a belief that there was not a literacy and basic skills curriculum framework which could meet the specific needs of industry and students.

Reflecting the national policy decision to incorporate language, literacy and numeracy into industry competency standards, the literacy and numeracy competencies will not be assessed or recognised separately. The successful completion outcomes of the vocational course will reflect the quality of the literacy and numeracy support provided.

The framework is designed to be applied to any vocational course, in any industry area, at any AQF level.

The aims of the curriculum vehicle are to develop:

- an accredited curriculum framework for literacy, numeracy, English language, oracy and study skills. This framework will include a wide range of underpinning literacy skills from which the individual skills needs of any student in any VET course might be identified. This framework is both a mechanism for accessing funds to deliver integrated literacy support and a basis for the collaborative development of initial assessment and learning activities.
- a set of guidelines for delivering integrated literacy support. The guidelines will identify problems and offer advice and examples of how literacy support might be set up for VET students. It will include specific advice on educational, organisational and systems issues including providing initial assessments, developing a culture of literacy awareness within a training organisation, and how integrated literacy support might be delivered within the training packages model.

6.2 How the framework will work in practice

The framework is primarily a mechanism for accessing funds to pay for a literacy/numeracy teacher to deliver integrated literacy support **within** the delivery of a vocational course.

It is intended to provide a basis for collaboration between vocational and literacy/numeracy trainers and lecturers to develop an industry-specific initial assessment tool. It can also provide the basis for vocational and literacy trainers and lecturers to collaborate in developing a program of integrated literacy support to meet the needs of the student group.

In practice, it is intended to be implemented in the following ways:

- A vocational trainer/lecturer, aware of the problems that some students have with literacy and numeracy underpinning skills, will seek out a trainer or lecturer with appropriate literacy/numeracy teaching expertise.
- On an equal collaborative basis, the vocational and literacy trainers/lecturers will design an assessment tool which will identify the literacy and numeracy gaps that students have, **wholly** in the context of industry specific assessment tasks. They will let students know about the integrated literacy support that will be available in the course.
- Initial literacy/numeracy assessments will be delivered by staff with literacy/numeracy teaching and assessing expertise. These assessments will include a one-to-one interview component, where assessors have an opportunity to identify the areas of strength that every student will have, and also determine the level of support they may need.
- The vocational and literacy trainers/lecturers will look at the outcomes of the assessments and arrange for students to enrol in one or more modules of the framework to meet their most apparent literacy or numeracy needs. For instance, half of the group may need to enrol in the Study Skills: Reading module, four students may need to enrol in the Study Skills: Writing module, five students may need to enrol in the Computation module, six in the Measurement module and ten in the Using Formulae module.
- The vocational and literacy trainers/lecturers will then determine the number of teaching hours that those enrolments create and begin to program for some of the team teaching sessions. For example, the vocational trainer/lecturer might identify the competencies that

include computation, measurement and using formulae and plan for four hours of team teaching a week while those competencies are being covered. For those hours, the literacy/numeracy teacher will teach alongside the vocational teacher to ensure that the students who need support to achieve the vocational competencies have someone alongside to teach them the underpinning literacy and numeracy skills.

- The vocational and literacy trainers/lecturers can also consider the other delivery options they might use. They may set aside hours for special one-to-one support for nominated students who appear to have significant gaps in their skills. The rest of the available hours might be left until further into the course, so that the trainers/lecturers can establish a clearer picture of how well those particular students are achieving the course competencies. Some time may, for instance, be set aside for the literacy teacher to spend more team teaching time with the whole group prior to scheduled assessment times.

7 Changes Suggested by Interviewees

Interviewees were asked what was needed to ensure that students receive the best possible assistance to acquire language, literacy and numeracy competencies within the new system. The following suggested actions incorporate their views.

7.1 Re-Introduce whole units of competence

Most lecturers from the trade/technical areas considered that the most effective way of dealing with language, literacy and numeracy was by the addition of two units of competence, Workplace Literacy and Workplace Numeracy into those training packages which had not incorporated them as a whole unit of competence. Others considered that students should have access to a bridging course to 'get them up to speed'.

This was in part a response to the fact that without a discrete unit allocated to these competencies, there was a view that there would be multiple overlap in developing competencies where language, literacy and numeracy were specified as underpinning skills and knowledge in a number of competencies.

On the other hand, those respondents with experience in the delivery and assessment of language, literacy, numeracy skills had a firm view that support should be provided alongside the vocational training, within the VET training environment be it classroom or worksite.

There was a strong view that team teaching, where the trainer with literacy teaching expertise teaches alongside the vocational trainer, creates a learning environment where literacy, numeracy and language support is normalised and ensures that the literacy support stays wholly relevant to the vocational course outcomes.

7.2 Develop leadership at senior levels

Where there was awareness and activity in relation to language, literacy and numeracy, it was noticeable there were also close ties with the adult literacy specialists within the State Training System and an active seeking of special purpose funds to meet the needs of students.

It was also noted that where there was leadership at a senior level

within one training organisation, there were positive outcomes such as the development of a policy response.

Without such leadership at a senior level within training organisations, language, literacy and numeracy issues will continue to be treated in an ad hoc way. Without leadership, responding to the language, literacy and numeracy needs of students will continue to be dependent upon accessing special purpose funds. In short, the incorporation of the competencies into National Training Packages will do little to alter their current marginalised status.

There are misconceptions about the relationship between literacy and intelligence so developing these competencies is not seen as mainstream, sexy business.

7.3 Provide literacy and numeracy information and professional development

Very few lecturers had any awareness of the resources that have been developed by DETYA and ANTA to assist training organisations to address the language, literacy and numeracy requirements of Training Packages. It was interesting to note that most staff welcomed the opportunity to talk about these issues within the context of this project.

The need for information and professional development for all staff was therefore seen to be critical. At a most basic level, there was little understanding of who was now responsible for literacy and numeracy. It also seemed that in some areas there was little communication between departments that will need to discuss these issues as Training Packages are progressively implemented.

7.4 Provide implementation kits

On one level the English language, literacy and numeracy competencies have been made explicit in each of the Training Packages in this study. In the case of the competencies being developed using the Hospitality Package (both in Cooking and in Food and Beverage), language, literacy and numeracy skills were primarily specified as underpinning skills and knowledge and were related to Mayer Key Competencies which include communication and maths competencies. Although the language, literacy and numeracy requirements were more visible in the Community Services Package, where they were integrated into the performance criteria of the standards, and specified in the Range statements and Evidence guide.

How these are interpreted by the provider is an issue.

In Western Australia, the Department of Training and Employment has opted to manage the implementation of training packages through the development of implementation kits. These kits provide a real opportunity to provide leadership, information and advice to training providers on the language, literacy and numeracy requirements of the packages.

7.5 Locate funding

While certain training activities attract ongoing funding, funding for language, literacy and numeracy skills development is not so secure. Mechanisms for routinely accessing funding for the development of those competencies that have been endorsed within National Training Packages are clearly needed.

Even where lecturers were receptive to the notion of providing integrated literacy and numeracy support they were concerned about the cost implications. However, all saw it as a worthwhile investment.

An examination of the capacity for redistribution of profile funds to provide mainstream support for language, literacy and numeracy activities is critical to effective implementation of the National Training Packages.

7.6 Recruit staff with literacy and assessment expertise

As the shift towards mainstream delivery of language, literacy and numeracy progresses, Heads of Departments and Program Managers in particular, saw that their selection and recruitment practices would need to take into account the capacity of staff to develop and assess these competencies.

It was suggested that, in future, expertise in one or both of these areas might need to become a prerequisite for appointment.

8 Key Issues from the research

8.1 Role of staff development

From this study it was evident that where there had been extensive staff development, there had also been greater attention paid to language, literacy and numeracy requirements and the development of appropriate learning strategies and assessment tasks. For example, where the Aged Care provider was involved in developing an assessment tool to determine whether carers in their employ met minimum workplace literacy requirements for litigious reasons. This meant that language, literacy and numeracy activities were in sharp focus for this RTO.

There was little evidence that many staff were aware of any industry specific resources that have been developed through the Workplace Communication projects. Nor were they aware of professional development kits designed for workplace trainers and assessors that provide strategies for identifying language, literacy and numeracy skills required for workplace training and assessment.

8.2 Role of management

Where the Human Services Program Manager and the Principal Lecturer played key management and adviser roles in the project, providing advice, direction and tangible assistance to participants this resulted in high levels of motivation and enthusiasm of staff.

Without leadership and knowledge in the language, literacy and numeracy areas, and a systematic approach stemming from such leadership, there is a concern that the attention to language, literacy and numeracy is going to vary considerably between providers. Such factors as the size of the institution and the skills and attitudes of the staff are likely to impact significantly on the extent to which these issues are addressed.

8.3 Support for training staff

The shift from curriculum to training packages was seen to be a major shift for lecturers and yet most reported little additional time was available to prepare for it.

It was also stated (by lecturers) that language, literacy and numeracy needs had never been adequately addressed in a systematic way across all

'departments' of training institutions. Technical staff in trade areas don't always have the skills to identify those having difficulties. With the current down-sizing of general studies areas, some campuses do not have specialist teachers to call on. This becomes particularly pertinent where more staff are placed on short-term sessional contracts.

8.4 Vulnerability of funding

There are a range of funding issues associated with the mainstreaming of language, literacy and numeracy skills development and assessment. It appears that a significant impediment to ensuring that the language, literacy and numeracy levels of the materials matched the requirements of the unit of competence is the level of funding made available. Students have difficulty in attaining competencies in the early stages of many courses, where theory predominates and the literacy and numeracy demands are quite heavy. While language literacy and numeracy competencies had been built in to the units of competence with the introduction of National Training Packages, there has been no provision for this additional requirement in the unit cost.

The introduction of the module load output rate in Western Australia, where all providers are required to meet output targets, has raised a number of concerns for training providers. Of major concern is the negative impact upon the quality of assessment.

Any activity that is seen as being marginal to the delivery profile of the training organisation is usually subject to very vulnerable funding. In the past, most efforts to deal with literacy and numeracy have come from 'special' funding sources. There has been no direct, mainstream way within the current funding mechanisms for VET providers to provide literacy or numeracy support to mainstream VET students. Some TAFE Colleges have used a dual enrolment in the Certificate of General Education for Adults (CGEA) to offer support 'in situ' for vocational students.

8.5 Potential to disadvantage students

There are concerns in some industry sectors that many older employees, who are good at the job, will 'battle' to meet literacy and numeracy skill requirements, if they are to have their skills, gained through workplace experience, recognised. Many of these workers are technically expert, but are really uncomfortable about the 'paperwork', and have learnt to compensate for their language, literacy or numeracy weaknesses.

Where skill gaps are identified through skills recognition processes, it will be critical that employers, assessors, and training providers are aware of the ways in which language, literacy and numeracy experts are able to provide sensitive and appropriate assistance and that adequate resources are allocated for the purpose.

With the incorporation of language, literacy and numeracy competencies into industry competencies (and particularly in those cases where there are not whole units of competence dedicated to workplace communication) it possible that students will 'slip' through the VET sector in the same way they have 'slipped' through the schools sector.

Students who have the right to articulate into degree courses may not have adequate literacy and numeracy skills to cope with the demands of tertiary education.

9 Recommendations

1. There needs to be a wider dissemination of relevant resource materials and professional development materials to literacy specialist and trade teachers.
2. A stronger leadership role should be taken by the State Training Department who need to emphasise management's role in facilitating the inclusion of English language, literacy and numeracy competencies the early stages of training package implementation.
3. Further research needs to be conducted on the various guidelines and resourcing arrangements for determining student output and teacher workloads that are in operation within RTOs to ensure quality of learning and work outcomes are not diminished.
4. Further research should be conducted into pathways for students between schools, TAFE institutions and the tertiary sector.

10 Concluding statement

One of the overarching issues that has emerged through this research is the importance of developing a training culture within enterprises. Where there had been an openness to explore the implementation of English language, literacy and numeracy competencies within their training provision positive outcomes resulted. This can be credited to having informed staff across all sectors of provision as well as a proactive commitment by leadership to the implementation.

Given that the implementation process is still at an early stage, the opportunity exists for RTOs and policy makers to address issues identified in this report and to set systems in place to enhance the quality of teaching and learning of English language, literacy and numeracy within industry training.

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Appendix 1

Questions for Training Providers

What language, literacy and numeracy requirements are included in the competency standards you are using?

In what ways are they specified in the Training Package?

Are there any Competency Units which deal solely with communication skills?

Are there any Competency Units which have communication skills included at the Element level? As underpinning skills and knowledge?

Which Competency Units have communication skills included only at the Performance Criteria level?

If language, literacy and numeracy competencies are not specified, do you take into account the underpinning language, literacy and numeracy skills that are necessary to support the competencies which you are helping people to develop?

At what stage in the planning of the training program did you identify the language, literacy and numeracy activities?

Could you answer the following questions about the language, literacy and numeracy requirements for all Units of Competency in the Standards you are planning to use.

- What do people have to listen to and understand?
- What do they have to say?
- What do they have to read?
- What do they have to write?
- Do they need to understand any diagrams, pictures or symbols?
- What maths calculations do they need to do?

How do you propose to /or have you addressed these requirements?

How will you ensure that your training materials and learning activities explicitly address the identified language, literacy and numeracy aspects?

How do you determine what workplace documents employees/potential employees need to read and write?

What support materials are available in the non endorsed components of the Training Packages?

Have you been invited to participate in any professional development activities related to Training Package implementation that has provided you with any assistance in dealing with language, literacy and numeracy requirements of the package you are using? Have you completed workplace communication skills awareness training?

Can you answer the following questions about your students?

- Do you have trainees from a non-English-speaking background?
- Do you have trainees who have literacy/numeracy difficulties?
- Do you have trainees with a specific learning disability?
- Are there any cultural issues which you need to consider?
- How do people from the trainees' culture/s feel about education and training?

Assessment

How will you ensure that assessment strategies and tasks address the language literacy, and numeracy aspects in the standards?

Are there any units of competency in the standards you are using which deal solely with communications skills?

Do you consider what communications skills are required for each of the assessment tasks you intend to use? How do you assess whether any candidates have particular communication difficulties? Can the assessment tasks be modified? How do you support students through the assessment tasks?

Have you considered a model where 'technical' assessors work alongside language, literacy and numeracy experts during the development of assessment tasks for aspects that primarily concern communication skills? During the actual conduct of the assessment?

How do you determine whether your assessment materials use language at the same level as that required by the standards they are designed to assess?

What communication exists between technical and language, literacy and numeracy experts in your organisation?

General

In your view what needs to happen in order for those who are undergoing training or assessment of their skills to be given every opportunity to receive

- the training they need
- fair assessment of their skills where language, literacy and numeracy are underpinning skills?

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