

Incorporating LLN into VET practice

Les Retford

The Queensland VET Development Centre

Abstract

International surveys highlight the problem of poor language, literacy and numeracy (LLN) skills in the general population (ABS, 2008, ABS, 2013). The challenges VET educators face in delivering vocational education (VET) to learners who have poor LLN skills are less understood. This research explores the drivers and inhibitors for VET practitioners incorporating LLN into VET practice. It reports the responses from participants attending a series of continuous professional learning (CPL) workshops focused on the Australian Core Skills Framework (ACSF) – a resource for benchmarking LLN skills.

Whereas, existing literature is generally silent on the role of VET practitioners with respect to LLN in VET practice, the findings indicate that, given the opportunity, VET practitioners can play a more significant role in helping address LLN concerns of their learners. Indeed, the surveys and literature identified a continuum of activities for incorporating LLN into VET practice.

This paper advances the notion that incorporating LLN into VET practice is not one single activity, but rather a range of activities. These range along a continuum commencing with raising awareness, seeking information, increasing collaboration between VET educators and LLN specialists, formalising collaboration through team-teaching activities, finally culminating in influencing policy and resource allocation.

Background

International surveys identified that significant proportions of the Australian population do not have the literacy or numeracy levels required to function effectively in modern society. The most recent survey, the OECD's Programme for International Assessment of Adult Competencies (PIAAC), showed that 7.4 million people (45% of the population) and 8.9 million people (55% of the population) scored below the functional literacy and numeracy levels respectively (ABS, 2013). This is similar to, and shows no improvement from previous surveys in the mid-1990s and mid-2000s (ABS, 2008, ABS, 2013).

Poor language, literacy and numeracy (LLN) skills are shown to directly impact on skill development and productivity (Shomos, 2010, Skills Australia, 2010) and on learners' ability to progress in their vocational education and training (VET) (Volkoff, Clarke & Walstab, 2008). Teese and Walstab (2009) assert that underperforming school students and older adults with incomplete schooling or poor literacy and numeracy skills gravitate towards the VET sector thus creating greater challenges for VET practitioners and registered training organisations (RTOs).

Registered training organisations (RTOs) employ a range of strategies to address LLN issues with their learners including pre-assessment and screening of learners, universal provision of literacy and numeracy support, staff development, contextualisation of literacy and numeracy support within vocational areas and targeted concurrent or team teaching (Volkoff, Clarke, & Walstab, 2008). Contextualisation of LLN skills provides the opportunity for learners to engage in learning when they recognise the relevance of LLN to their vocational study and work (BIS, 2011, Casey et al, 2006; Marr & Hagston, 2007; Perkins, 2009). ‘Team-teaching’ is an approach whereby a technical expert shares a student cohort with a LLN specialist (Casey et al, 2006; McKenna & Fitzpatrick, 2005; Wickert, Searle, Marr & Johnston, 2008). This, however, has some obvious limitations; it is more resource intensive, does not fit most apprenticeship training funding models and it relies upon the availability of LLN specialists - who are in short supply and aging (Mackay, Burgoyne, Warwick, & Cipollone, 2006; Misko, 2005; Perkins, 2009). To help address this shortage, a range of government initiatives have aimed to build the capability of VET practitioners (DIISTRE, n.d.).

Building the capability of VET practitioners to deal with the poor literacy and numeracy skills of learners is problematic. Mackay et al (2006) found vocational trainers had received little, if any, training in how to address literacy and numeracy issues. This is reflected in the existing literature on capability building of VET practitioners which refers to a range of areas in which to build capability, but gives scant attention to addressing LLN skills of learners (Dickie et al. 2004, Guthrie & Clayton, 2010, Harris, et al., 2001, Reed et al, 2003). Falk and Millar (2000) reported variable outcomes of capability programs due to a range of factors: a lack of clarity of specific literacy and numeracy requirements as part of competency-based learning in some training packages, and a tendency of some trainers to overlook literacy and numeracy as underpinning skills because of lack of knowledge and expertise on their part, compounded by a lack of resources to articulate literacy and numeracy requirements of training packages. NCVET (2006) identified a range of impediments for VET practitioners taking up CPL in LLN.

Whereas Australia was regarded as a leader in LLN in the 1980s, it has been criticised for not doing enough in the intervening years (McKenna & Fitzpatrick, 2005; NALA, 2011; Perkins, 2009; Skills Australia, 2010; University of Ballarat, 2009). The National Foundation Skills Strategy for Adults (NFSS) was developed by Australian governments in late 2012 as a ten-year strategic initiative to develop and maintain the foundation skills adults. Its target is that by 2022, two thirds of working age Australians will have literacy and numeracy skills at Level 3 or above (SCOTese, 2012). The NFSS has been hailed as the most significant LLN initiative in the past twenty years in Australia (ACER, 2012). The NFSS supports the: ‘Building the capacity of the education and training workforces to deliver foundation skills... supporting vocational trainers to better integrate foundation skills with vocational training’ (SCOTese, 2012, p 3). These complement specific government initiatives including the development of supporting resources such as the Australian Core Skills Framework (ACSF).

The ACSF was developed based on the ‘National Reporting System’ (NRS) (1995). Whilst it was designed primarily for use by LLN specialists (DEEWR, 2008), QVDC felt that it could be used by a wider audience, specifically VET practitioners as it offers a systematic and detailed tool for describing and measuring LLN skills (DEEWR, 2008, p. 2). The ACSF could provide a useful resource for VET practitioners as it is underpinned by a broad range of theoretical understandings around adult learning, language, literacy and mathematical development. In fact, the 2012 updated version of the ACSF has a much stronger focus on VET; it states that it can be used for a range of purposes including tailoring training, teaching, learning and assessment and to assist VET practitioners to provide specific feedback on performance (DEEWR, 2012). The ACSF offers a common language and precepts to promote a common ground for dialogue between VET educators and LLN specialists.

QVDC Workshops

The Queensland VET Development Centre (QVDC) conducted a series of seven workshops in metropolitan and regional Queensland to build the capacity and capability of VET educators around LLN in support of the Queensland VET Continuous Professional Learning Strategy 2012-15 (QVDC, 2011). These workshops focussed on the Australian Core Skills Framework (ACSF) and related Commonwealth and Queensland State Governments’ initiatives. Knowledge of the ACSF was a key to help VET practitioners integrate LLN into VET practice. These workshops aimed at developing the awareness and starting the build the confidence and skills of VET educators to help address issues arising from learners with poor LLN skills.

The QVDC used these workshops to gather data on issues VET practitioners face with respect to poor LLN of learners. Participants were surveyed at the commencement of the workshops about their experience of learners in VET with poor LLN skills, and knowledge of relevant resources and initiatives. At the end of the workshops participants were asked about their intention to modify their teaching, learning and assessment practices to incorporate newly-gained knowledge.

Following the workshops participants were asked about changes they would like to make to their teaching, learning and assessment (from a LLN perspective) and how they could be supported to make changes. From the 104 participants in the workshops, 90 participant surveys and 79 evaluation surveys were gathered.

Profile of participants

The workshops attracted participants from public and private RTOs with some representation from the school sector. Participants were engaged in a cross-section of roles, with most (49) describing themselves as VET practitioners. Managers (education and training) were well represented with 17 participants. LLN/Learning support was also well represented with 15 participants.

Limitations

The respondents in this survey may not be representative of the VET sector as whole. Participants had the interest, opportunity and support to attend these workshops. To attend full-day workshops, participants' teaching roles would need to be filled by other staff; and participants were charged a fee to attend the workshop. These require both agreement and support from management.

In addition, participants made the effort to attend the workshops, and therefore may not be representative of the VET sector. Simply by making this effort, they set themselves apart from their peers.

Experiences of LLN problems

When asked about their experiences of learners with poor LLN skills, the overwhelming majority of participants (93%) reported experiences of learners with poor LLN skills. 86% of respondents reported this had impacted upon teaching, learning and assessment. Of the nine respondents who indicated poor LLN skills did not impact upon their TLA practices, only three of these were VET practitioners. The other six participants were not in frontline teaching roles (administration, training coordination, instructional design). One LLN specialist was surprised how low some students' LLN skills were. There were problems in communicating with learners: on the way they instructed students, on emails they sent students and the way they needed to word communication for their students to understand them.

Respondents identified many ways in which poor LLN skills impacted upon their TLA practices. Lack of underpinning skills such as reading, writing and study skills slowed progress in off-job training. Learners struggled to engage with learning materials because of poor understanding and comprehension skills. They were unable to read textbooks or comprehend assessment questions. Learners who have poor writing skills were unable to express themselves. They were poor at sentence construction and paragraph writing. They made spelling mistakes.

Learners for whom English is their second language (including Indigenous Australians) struggled with English language, especially with the nuances around context. Some learners were afraid to speak in public and find it difficult to express themselves.

Poor numeracy skills of learners meant they were unable to do simple arithmetic or use spreadsheets.

Respondents said that poor LLN skills lead to higher attrition, reduced progression, reduced completion rates and lower articulation into further study. They stated that poor LLN skills affect learners' self-esteem and self-belief.

Participants' confidence in dealing with LLN problems

Although most participants expressed confidence in their own ability to address issues around learners with poor LLN skills (55%), 30% reported concerns with their confidence. The remaining 15% did not respond.

Not surprisingly, LLN specialists expressed the strongest confidence in addressing poor LLN skills of their learners. This was largely due to their educational background and experience. One respondent called upon their many years as a primary school teacher in Australia and overseas; another, their post-graduate level education in LLN.

VET practitioners recognised the need to continue developing their skills. These included looking for new and different ways to work with students. There was recognition that learning was an ongoing process with people eager to build up their own skills and knowledge. A response was to be guided by a specialist LLN teacher to achieve this outcome.

LLN specialists provided insights into the processes they utilised. Their strategy was to assess their learners' LLN strengths and weaknesses to determine their skill level, assess what the learner needs to know to complete their studies, determine their learning style, develop a training plan to suit, modify training to assist with skills deficit and work towards those goals. Patience, understanding learner differences and adapting to individual learners' needs were listed as essential learning strategies to achieve this.

How participants modified their teaching, learning and assessment

Respondents said they had to modify pedagogical approaches to their TLA delivery. Delivery was 'slowed down' but not 'dumbed down'. More one-on-one instruction was required, but this was time-consuming. Resources needed to be changed, for example altering recipes and the text in written work. This reduced the amount of time available for technical training. Learners with poor LLN skills needed to re-sit assessments more often. Use of reasonable adjustment and 'work-arounds' were reported as strategies to mitigate poor LLN skills. The exception was in science where poor LLN skills impacted heavily on students being able to complete units successfully.

Respondents noted the challenges with targeting training to a class with a divergent range of LLN skills. Learners struggled to engage with others and learn at a similar pace. They expressed concerns that in modifying the TLA to suit learners with poor LLN skills, other learners became bored or disinterested. The need for tutoring support and problems accessing support staff was raised as a concern. LLN specialists were not always available when needed (reflecting Perkins' concerns).

Poor LLN skills are not confined to lower levels of training. Concerns were raised about the literacy skills of Certificate IV Training and Assessment students to read, interpret and analyse training packages. Some participants reported their learners had difficulty in writing course materials and assessment at the appropriate LLN skill level.

What participants were seeking from the workshop

LLN specialists

LLN specialists were interested in gaining practical strategies and approaches rather than just theoretical perspectives to incorporate core skills into their activities. They were looking for ways to help VET educators to better understand the ACSF. LLN specialists wanted to develop networks and work with VET practitioners in integrating LLN into VET practice. They expressed a desire for the teaching of the TAELLN401A unit to VET practitioners. Suggestions covered the role of the vocational teacher to define LLN requirements of units, qualifications and skills sets, determining LLN needs of learners and developing the LLN skills of their learners in vocational contexts. Team-teaching was cited as strategy.

VET educators and managers

Managers and VET practitioners were seeking similar outcomes. Managers were looking for general information on LLN issues, better understanding of LLN and foundation skills (LLN and Employability Skills) and how they affect Training Packages and application into programs and training. They wanted to know how the ACSF relates to the specific vocational areas. They were concerned about how it is meant to be delivered – as stand-alone training or in conjunction with other training. Respondents were seeking information about where they could access other helpful resources to help their learners. They wanted to know how to avoid problems arising from this in advance and how to implement it correctly within training and assessment for both domestic and international students.

VET practitioners wanted practical ideas for integrating LLN skills into training practices. They wanted practical ideas to assist their learners. They wanted tips to improve their assessment to better accommodate LLN issues and to ensure they are at the correct level. They wanted guidance on how to follow up on assessments of learners' LLN skill levels. They are in the position to facilitate continuous professional learning for their staff members.. Others were utilising the workshops to develop an understanding of ACSF for current and future training.

The Australian Core Skills Framework (ACSF)

Most of the people attending the workshops had not used the ACSF. These were mainly VET practitioners (75%) but also out a quarter of LLN specialists had not used the ACSF which was surprising given the purpose of the ACSF as a LLN resource, (albeit there were a small number of respondents). This is despite the

resource being available for more than three years and being a cornerstone of relevant government initiatives.

Respondents who had reported using the ACSF used it: to determine the LLN levels of learners; as a teaching guide to identify core LLN skills in a unit of competency; and to identify LLN levels in learning resources and assessments. It showed the areas the students needed to focus on and gave ideas about the type of tasks to improve their skills. It helped in developing a curriculum, resource and accredited programs. It was used to guide stand-alone LLN training and to report the progression of learners' LLN skills and outcomes for a LLN program. It was reported as being used for continuous professional learning, to assist VET teachers unpacking training packages, as a resource for TAELLN401A and for formal study (the Vocational Graduate Certificate in Adult Language, Literacy and Numeracy Practice). It provided ideas of concepts that can be used to write a resource over various levels with good definitions and examples of work activities, skills and abilities.

Why participants had not used the ACSF

Respondents who had not used the ACSF said they didn't know about it or they were not aware of the process to actually apply it. Other reasons for not using the ACSF included that learners were presumed to be at the appropriate LLN skill level; the complexity of the ACSF; or that they were time poor or had little opportunity to investigate the resource.

More demand for training in the use of the ACSF

There were suggestions for further continuous professional learning in how to use the ACSF. These included specific workshops on how to understand and implement it. More training was needed on how to integrate LLN into TLA resources. Respondents wanted to gain more understanding about how the ACSF could be used for literacy and numeracy trainers to teach VET practitioners.

What participants plan to do following the workshops

The workshops were designed to stimulate greater integration of LLN in VET practice. At the end of the workshops, participants were asked what they would like to do to further integrate LLN into their VET practice, and, importantly, what support they would need to do this. They cited a range of changes they would like to make.

Increase their awareness of LLN issues

Respondents wanted to be more aware of LLN issues. They wanted to increase their awareness of LLN issues through more study and access to information. Another said they can now see how to be more effective in recognising LLN needs. They felt that with more study the issues around LLN will become clearer.

Modify TLA resources for LLN

Following the workshops participants made suggestions on how they would modify their teaching, learning and assessment to be more cognisant of LLN. They wanted to ensure learning materials used the appropriate level of language. It was proposed that assessment tools would be rewritten and

Change their teaching pedagogy

Whilst many participants were experienced VET educators, they talked of improving their teaching to incorporate their new knowledge. Strategies suggested included: explaining more, cutting down on the complexity of their resources, making the task more reasonable, more problem solving and hands-on activities, reviewing learning and assessment strategies to incorporate/ integrate LLN, increasing demonstration of literacy, reviewing the level required for the workplace, and being more proactive towards students with learning difficulties.

A range of support was required to undertake these, including teaching how to apply strategies, team meetings, mentoring, team teaching, time, funding, resources, and administration support. One participant recommended the need for acknowledgment of importance of LLN by management by allocating time.

Conduct assessment of the LLN skills of their learners

There was considerable discussion on conducting assessments of the LLN skills of learners. Participants said they would try to carry out LLN assessments to identify students who require extra assistance with the support of LLN staff. This would lead to a better understanding of where learners were before proceeding with their courses. However, one participant wanted to use better techniques to find out what LLN skills students required, rather than using a deficit model. Another participant indicated that they would employ a more comprehensive 'pre-enrolment' conversation about LLN, although this would take more time.

Undertake Continuous Professional Learning

Respondents stated the workshops motivated them to engage or continue in formal training. Some managers said they would support staff undertaking CPL including completing the TAELLN401A unit. Some participants said the benefit of CPL was developing new networks.

Increase collaboration

There were many responses from both VET practitioners and LLN specialists about the need to increase collaboration with each other. Participants were particularly interested in collaborations where LLN specialists assisted VET practitioners to improve their resources through a validation process, and their pedagogy by modelling best practice. This would enable them to develop strategies to assist with early identification and to help address problems. LLN specialists were interested in working collaboratively to help contextualise LLN to VET and workplace situations.

LLN specialists could assist with mapping the core skills (LLN) in training packages as there were reported lack of clarity and specificity in some training packages. One participant wanted to interact more with LLN colleagues and planned to make more referrals. Another wanted to have a LLN teacher assist with reviewing learning materials and assessments. In fact, this had already been discussed in their team.

Complementing this, three LLN specialists said they wanted more collaboration and dialogue with VET staff, including team teaching. This could be achieved with the allocation of time and resources, supported by their institute. A practical suggestion was to share information of new and relevant changes.

Team-teaching

Two VET educators and a LLN specialist specifically referred to team teaching to help support students who have poor LLN skills. They suggested team teaching could support with embedding the teaching of LLN in vocational classrooms. Team-teaching where two teachers deliver technical and LLN training concurrently is difficult to accommodate under current funding and reporting arrangements. The increased resources needed were recognised by respondents.

Funding

Another significant area for VET practitioners to influence is funding. Many respondents reported the need to access funding to support the changes they wanted to make. Some suggested strategies challenge existing funding regimes. It was stated that this additional resources would lead to increased retention and completion rates. Many respondents wanted an assessment of learners' LLN skills prior to commencing VET courses. It was suggested that empirical evidence of improvement in LLN skills would be needed to justify the expenditure of public funds.

Integrating LLN into VET practice as a continuum

Responses from participants identified that the concept of integrating LLN into VET is not clearly articulated. Rather than being seen as an insular activity, it should be seen as a concept with activities ranging across a continuum. The continuum ranges from informal discussions between LLN specialists and VET educators through to influencing systemic practice. There may be grouped in five broad areas:

1. Raising awareness
2. Seeking information
3. Increasing collaboration
4. Team-teaching
5. Influencing systemic practice

They are presented in a spiral to signify the expanding sphere of influence each point in the continuum. These are summarised in Figure 1. These broad headings are expanded with more detail which has the potential to inform the VET sector.

Figure 1 The Integrating LLN into VET Practice Continuum



Conclusions

Much has changed in terms of integrating LLN into VET practice. Contemporary policies actively promoting integrating LLN into VET practice is a significant platform in national, state, industry, enterprise and training organisation agenda.

What is less clear in these agenda is how this can be done. This research offers some insights into strategies that help in this endeavour. Most significantly it shows clear examples of how VET practitioners and LLN specialists have, or would like to integrate LLN into their VET practice. This has not been articulated in research to date. Nor has the range of activities that constitute integrating LLN into VET practice been articulated. This paper argues that clearly articulating these components will provide guidance for VET practitioners. If the components resonate, this will stimulate action. This is the potential value of the theoretical framework.

Recommendations

It is recommended that:

- further research be undertaken to ascertain how VET practitioners could modify their teaching, learning and assessment to specifically address LLN issues
- the VET sector be monitored to identify changes in LLN in VET practices
- VET practitioners be encouraged to undertake CPL and formal training in nationally-recognised units of competency, skill sets and qualifications related to LLN
- allocation of resources for LLN in VET be re-examined
- the Integrating LLN into VET Practice Continuum be promoted, investigated further and refined.

References

- Australian Bureau of Statistics. (2008). *Adult Literacy and Life Skills Survey Summary Results, Australia 2006*. Canberra: ABS
- Australian Bureau of Statistics. (2013). *Programme for International Assessment of Adult Competencies - Preliminary Findings*. Canberra: ABS
- Australian Centre for Educational Research. (2012). *It's time: Language, literacy and numeracy and the new Core Skills Profile for Adults*. Camberwell: ACER
- Balatti, J., Black, S. & Falk, I. (2009). *A new social capital paradigm for adult literacy: Partnerships, policy and pedagogy*. Adelaide: NCVER
- BIS. (2012). *Armed forces basic skills longitudinal study: Executive Summary BIS Research Paper Number 80*. London: BIS
- Casey, H., Cara, O., Eldred, J., Grief, S., Hodge, R., Ivanic, R., Jupp, T., Lopez, D. & McNeil, B. (2006). "You wouldn't expect a maths teacher to teach plastering..." *Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement*. London: NRDC
- DEEWR. (2008). *Australian Core Skills Framework*. Canberra: DEEWR
- DEEWR. (2012). *Australian Core Skills Framework*. Canberra: DEEWR
- DETE. (2012). *Queensland VET Continuous Professional Learning Strategy 2012-2015*. Brisbane: DETE
- Dickie, M., Eccles, C., FitzGerald, I. & McDonald, R. (2004). *Enhancing the Capability of VET Professionals Project: Final Report*. Adelaide: NCVER.
- DIISTRE. (n.d.). *Language, Literacy and Numeracy Practitioner Scholarships Program*
- <http://www.innovation.gov.au/Skills/LiteracyAndNumeracy/LanguageLiteracyAndNumeracyPractitionerScholarshipsProgram/Pages/default.aspx> viewed: 22 March 2013
- Falk, I. and Millar, P. (2000). *Review of research: literacy and numeracy in vocational education and training*. Adelaide: NCVER
- Guthrie, H. & Clayton, B. (2010). *Building capability in vocational education and training providers: the TAFE cut*. Adelaide: NCVER
- Harris, R., Simons, M., Hill, D., Smith, E., Pearce, R., Blakeley, J., Choy, S. & Snewin, D. (2001). *The changing role of staff development for teachers and trainers in vocational education and training*. Adelaide: NCVER
- Mackay, S. Burgoyne, U. Warwick, D. & Cipollone, J. (2006). *Current and future professional development needs of the language, literacy and numeracy workforce*. Adelaide: NCVER

- Marr, B. & Hagston, J. (2007). *Thinking beyond numbers: learning numeracy for the future workplace*. Adelaide: NCVER.
- McKenna, R. & Fitzpatrick, L. (2005). *Integrated approaches to teaching adult literacy in Australia: A snapshot of practice in community services*. Adelaide: NCVER.
- Misko, J. (2005). *Country background report: Addressing the training and assessment needs of adults with low basic skills in Australia* (contribution to the OECD study “Improving Teaching and Learning for Adults with Basic Skill Needs through Formative Assessment”). Adelaide: NCVER
- National Adult Literacy Agency (2011). *A Literature Review of International Adult Literacy Policies*. Dublin: NALA
- National Centre for Vocational Education Research. (2006). *Reading between the lines: Summing up the adult literacy and numeracy research – Breakfast briefing exhibits*. Adelaide: NCVER
- Perkins, K. (2009). *Adult literacy and numeracy: Research and future strategy*. Adelaide: NCVER.
- Queensland VET Development Centre. (2011). *What’s happening with LLN in VET? Report on the 2010/2011 VET Connect Symposiums*. Brisbane: QVDC.
- Reed, C., Forwood, A. & Reed, M. (2003). *‘Have Your Say’: a forum for teacher views on issues related to teaching and learning in TAFE*. Melbourne: OTTE
- SCOTESE, (2012). *National Foundation Skills Strategy for Adults*. Canberra: DEEWR.
- Skills Australia. (2010). *Workforce Development Strategy*. Canberra: Skills Australia
- Shomos, A. (2010). *Links Between Literacy and Numeracy Skills and Labour Market Outcomes (Staff working paper)*. Canberra: Productivity Commission.
- Teese, R. & Walstab, A. (2009). *Social area differences in VET participation in Australia*. *Bulletin of Labour*. Adelaide: 2009. Vol. 35, Iss. 2; p. 438.
- University of Ballarat. (2009). *The New Deal*. Sydney: Services Skills Australia.
- Volkoff, V., Clarke, K. & Walstab, A. (2008). *The Impact of TAFE Inclusiveness Strategies*. Adelaide: NCVER
- Wickert, R., Searle, J., Marr, B. & Johnston, B. (2008). *Opportunities, transitions, and risks: perspectives on adult literacy and numeracy development in Australia*. in *Connecting Research, Policy, and Practice. Review of Adult Learning and Literacy, Volume 7* (Eds: Comings, J., Garner, B., & Smith, C.) New Jersey: Lawrence Erlbaum Associates