Language Literacy and Numeracy in TAFE Diploma of Nursing (Enrolled/Division 2 Nursing)

Report

Researchers
Children and Youth Research Centre, Queensland University of Technology
Professor Mary Ryan, Professor Kerry Mallan, Dr Karleen Gwinner

TAFE Queensland Brisbane
Dr Cheryl Livock

17 July 2015
CRICOS No. 00213
Pilot Report

This project aimed to identify current Language Literacy and Numeracy (LLN) and Inclusive Teaching and Learning Practices in a TAFE Diploma of Nursing (Enrolled/Division 2 Nursing). The key purpose of the study was to make recommendations for improving inclusive teaching practice and learning outcomes of students and for reducing student attrition, thereby increasing the employability of graduates in the health industry subsequent to course completion.

Researchers

Children and Youth Research Centre, Queensland University of Technology
Professor Mary Ryan, Professor Kerry Mallan, Dr Karleen Gwinner
TAFE Queensland Brisbane
Dr Cheryl Livock

Acknowledgements

The research was supported by funding from TAFE Queensland Brisbane. The researchers acknowledge their support.

The researchers would like to thank the TAFE staff and students who generously participated in interviews and welcomed us into their classrooms. We acknowledge and thank the support of the research assistance provided by Donna Pennell and Kristy Farley through the Children and Youth Research Centre.

Correspondence to:

The Children and Youth Research Centre
Queensland University of Technology

http://www.cyrc.qut.edu.au/
Email: cyrc@qut.edu.au

Victoria Park Road
Kelvin Grove, 4059
Australia

©2015 Queensland University Technology: Brisbane.
1. SYSTEM WIDE ARRANGEMENTS INFLUENCING LLN AND INCLUSIVE TEACHING AND LEARNING .......................... 37
   Why did you choose to do a Diploma of Nursing? ............................................................................. 37
   Course entry prerequisites .............................................................................................................. 38
   Administration systems and the impact of policy changes ........................................................ 40
   Learning Support, Library Resources, Foundations Programs and the Classroom ...................... 42
   SUMMARY ........................................................................................................................................ 46
2. FACTORS THAT SUPPORT OR INHIBIT POSITIVE LLN AND INCLUSIVE TEACHING AND LEARNING ..... 47
   Content Heavy Courses ................................................................................................................ 47
   Teacher-led classroom approach .................................................................................................. 50
   SUMMARY ........................................................................................................................................ 51
3. ASSESSMENT PRACTICES, AND TEACHING AND LEARNING DETERMINANTS OF COURSE SUCCESS OR FAILURE ........................................................................................................ 52
   Assessment .................................................................................................................................... 52
   How teachers teach ........................................................................................................................ 55
   How learners learn ........................................................................................................................ 57
   SUMMARY ........................................................................................................................................ 59
RECOMMENDATIONS ................................................................................................................................. 62
CONCLUSION ........................................................................................................................................... 63
REFERENCES .......................................................................................................................................... 64
APPENDICES ........................................................................................................................................... 72
   APPENDIX A ............................................................................................................................ 72
   APPENDIX B ............................................................................................................................ 73
   APPENDIX D ............................................................................................................................ 77
   APPENDIX E ............................................................................................................................ 78
   APPENDIX F ............................................................................................................................ 83
   APPENDIX G ............................................................................................................................ 89
   APPENDIX H ............................................................................................................................ 90
   APPENDIX I ............................................................................................................................ 91
Language Literacy and Numeracy in TAFE Diploma of Nursing (Enrolled/Division 2 Nursing)

LLN Inclusive Teaching and Learning Study Pilot

Executive Summary

The Vocation Education and Training (VET) sector occupies an important place in Australian education. It has long been responsive to demands that Australian workers are highly skilled and job ready. Australian governments since the 1980s have promoted reforms in the VET sector to mediate skill shortages and ensure that more Australians can participate meaningfully in economic and social life. In varying ways reforms have emphasised investment in training to meet the skills needs of industry, and to ensure a commitment to accessible and inclusive training opportunities in Australia. Technical and further education (TAFE) institutions provide a wide range of practical, relevant and quality programs which have traditionally filled the educational needs of the community and industry with a focus on: entry level training and workforce training; the special needs of disadvantaged groups within society; and the retraining needs of those who wish to re-enter the workforce after an absence or as a result of redundancy.

TAFE Queensland prides itself as an award-winning vocational education and training provider delivering higher education qualifications with relevance to the workplace. Annually, over 20,000 students benefit from access to over 150 programs that allow them to develop new skills and further career choices. TAFE delivers training in strong foundation skills in all occupational areas to meet the increasingly complex skill requirements for higher-level workplace employment.

“I’d never done anything so academic before... They did provide us with materials or guides, if you like, to stuff like academic writing, or the appropriate referencing for assessments. They gave us marking criteria for most assessments, so you could refer to the back of your assessment and make sure that you’ve crosschecked and you’ve done everything that’s required.”

What are the things the teachers did that really made the lessons come to life?

“When they’re explaining something it’s good when they can give a scenario from the workplace and put it in context. It just makes us want to keep going.”
TAFE offers an enrolled nurse training program at the Diploma level to equip learners with the skills and knowledge they need to succeed as a nurse. In Australia, registered and enrolled nurse education is carried out predominantly in two distinct tertiary educational settings. Enrolled nurses are prepared to Undergraduate Diploma level at TAFE and must meet National Competency Standards for the Enrolled Nurse. While university courses tend to have a stronger academic focus. The changing importance and scope of practice for enrolled nurses necessitate attention to training that enhances self-directed learning, more advanced academic standards and new technological challenges.

The core skills essential to the performance standard of enrolled nurses in the provision of patient-centred nursing care include:

- being information technology literate
- demonstrating critical and reflective thinking
- contributing to the formulation of care plans
- interpreting patients’ charts (temperature, pulse and respiration rates)
- administering and monitoring medication
- having knowledge of legislation and common law pertinent to enrolled nursing practice.

(Australian Nursing Council, 2002)

With a high proportion of English as Second Language students, as well as students with limited prior educational experiences, it is vital that optimal learning frameworks develop all students’ deeper understanding of the language literacy and numeracy knowledge essential to the enrolled nurse scope of practice. As a leading provider of quality vocational education and training, TAFE has an important role to play in addressing issues in relation to inclusive teaching and learning practices, and the development of language literacy and numeracy needs of enrolled nursing students.

This report presents findings from a pilot study to identify current Language Literacy and Numeracy (LLN) and Inclusive Teaching and Learning Practices in TAFE's Diploma of Nursing (Enrolled/Division 2 Nursing). The findings provide an important insight into the current provision of foundation skills and bridging courses to assist students in the Diploma of Nursing (Enrolled/Division 2 Nursing). Observational data, course documentation and interviews with students and teachers from the course have identified several key issues and opportunities related to the system-wide arrangements, curriculum, pedagogy, and assessment practices that influence successful teaching and learning practices in the Diploma Course at two campuses.

Main Findings

System wide arrangements influencing LLN and inclusive learning and teaching in the VET sector:

- There is an imperative to support language literacy and numeracy learning as an integral part of the course, contextualised within the enrolled nursing scope of practice;
A key factor in meeting the needs of learners with low LLN skills in the vocational education and training sector is the importance of building the capability of practitioners and the system more broadly to meet the literacy and numeracy needs of learners;

Recent policy and reform agendas adversely impact staffing levels, administration, resources and LLN and academic learning support;

The impact of the new contestable-market as an implied driver of student attainment places considerable strain on accomplishing a fully integrated approach to meet the LLN needs of learners;

Internal administration systems, communications, and accessibility of resources creates problems for students.

Factors that:

**support** positive LLN and inclusive teaching and learning:

- The release of the FSK Foundation Skills Training Package is influential in supporting a successful upfront teaching and learning approach to LLN skills development;
- The provision of essential learning resources (both within and external to the classroom), academic and LLN specialist learning support staff, and inspiring a community of practice to support students and foster their learning are significant positive factors.

**inhibit** positive LLN and inclusive teaching and learning:

- The decreasing provision of learning support and specialised staff during the period of the study is a concern;
- Teacher-led classroom approaches, highly structured curriculum, and tight timeframes limit the opportunity for alternative inclusive approaches or experiential learning environments to cater for diverse needs;
- A disjuncture exists between the curriculum framework designed to meet the ANMAC competencies and standards, and the teaching and learning flexibility needed to engage alternative vocational pedagogical practices.

Assessment practices and teaching and learning **determinants** of course success or failure:

- Good teachers are recognised as the most significant difference between success and failure.
- Peer support and learning resources are identified as essential to meeting the needs of learners with low LLN skills and thus the needs of workforce development;
- Opportunities are limited to tailor language literacy and numeracy skills development fully into a fluid and multi-layered approach in the course;
- The curriculum is supplied to teachers in congested PowerPoint presentations with limited opportunity for pedagogical variation;
- Course assessment using the cluster system is proving unsatisfactory for both staff and students. Many students repeat semester units in order to graduate, costing student time and money.
Recommendations

1. Inclusive curriculum and pedagogy needs to be built around diverse learning needs of students by implementing a range of appropriate strategies.
2. The cluster assessment system needs to be reviewed.
3. A multi-layered, contextualised approach to LLN programs needs to be taken to ensure appropriate support is available and accessible for all students.
4. Professional learning opportunities needs to be provided for all VET teaching practitioners to ensure that they have the knowledge and skills to adopt a range of inclusive teaching practices.
5. Internal administration systems need to be reviewed.

Teacher Cohort Summary

- 5 teachers interviewed
- Age range: 37-54 years
- Years teaching: 7 weeks to 6 years
- Contractual arrangement: full time permanent, full time temporary, part time ongoing, part time temporary, casual
- LLN/ESL/LOTE training: only one teacher had specific training twelve years earlier
- Teacher training: Cert IV TAA/TAE, Grad Dip in Adult and Tertiary Education
- Nurse Training: BNursing, Grad Dip, Dip and Masters

Students Cohort Summary

- 68 enrolled students in final semester 2014 invited to participate in the interviews
- 88 students observed in typical classroom teaching and learning
- 16 interviewed (1 withdrawn student)
- Age range: 20-41 years
- Language background included: Mandarin, Arabic/Kurdish, Tongan, Taiwanese and English
- All students had Australian citizenship

Local Context Summary

- 2 campuses were involved in the study
- Course duration is 1.5 years (three semesters). Part-time: 3 years
- There are no formal entry criteria for enrolment
- Fees for the course are: full - $18,490; subsidised - $11,600; concession - $10,424
- 2 core units were observed in the study (HLTAP410B and HLTEN513B)
- Data related to 4 units (HLTEN506B, HLTEN507C, HLTEN508B, HLTEN513B) and the 123 Program literacy and numeracy preparatory program were reviewed
Introduction

This study aimed to identify current Language Literacy and Numeracy (LLN) and Inclusive Teaching and Learning Practices in TAFE’s Diploma of Nursing (Enrolled/Division 2 Nursing). The key purpose of the study was to make recommendations for improving inclusive teaching practice and learning outcomes of students and for reducing student attrition, thereby increasing the employability of graduates in the health industry subsequent to course completion. The study comprised three components underpinned by a qualitative approach. Component One involved an appraisal of recent research, policy and literature, and a review of documents pertaining to the course; Component Two comprised observation of teaching and learning in classrooms; and Component Three consisted of structured interviews with teachers and students.

The research team have examined literature of current best practice and understanding of LLN provision in the vocational sector nationally and internationally. An extensive review was also undertaken to examine how policies and legislation influence the delivery of LLN and inclusive teaching in Vocational Education and Training.

For students with LLN difficulties, foundation skills and bridging courses are essential to develop their skill and confidence in the workplace. Positive factors such as good teachers, peer support and learning resources were identified in the study as essential to meet the needs of learners with low LLN skills and thus the needs of workforce development. There were however impediments to TAFE’s ability to assist individuals in the current arrangements for effective targeted support. Observational data, course documentation and interviews with students and teachers from the course have identified several key issues and opportunities related to the system wide arrangements, curriculum and pedagogy that influence successful teaching and learning practices in the Diploma of Nursing Course at two campuses.

The following questions guided the study:

RQ1: What are the system wide arrangements influencing LLN and inclusive teaching and learning in the VET sector?

RQ2: What factors support or inhibit positive and effective teaching and learning environments for LLN and inclusive teaching and learning?

RQ3: What are the assessment practices and teaching and learning determinants of course success or failure?

This report is set out in two parts:
Part one responds to RQ1 and begins with an overview of recent research, policy and literature related to the factors pertinent to LLN and inclusive teaching in the vocational education and training sector in Australia.

Section one begins with a synopsis of TAFE Queensland and the Diploma of Nursing. A review of literature examines key concepts, practices and directions relating to LLN and inclusive learning in vocational training. The discussion highlights important factors required to meet the needs of workforce development and the needs of learners with low LLN skills. Next a chronicled summary of Australian policy is considered in relation to structural and institutional transformations in the vocation education and training sector, funding models and professional standards for practitioners and teaching expertise. Finally the educational preparation of enrolled nurses is discussed in consideration of the context, demand and motivation within the VET sector.

Section two provides a detailed discussion of the research design and the methodological approaches. The principles that underpinned the research are set out, the methods are outlined and the recruitment processes are explained.

Part two of this report presents the findings of the study drawn from a review of documents pertaining to the course, observations of teaching and learning in classrooms, and structured interviews with teachers and students.
Part One. Background and Approach

An Overview

TAFE Queensland and the Diploma of Nursing

TAFE Queensland is a leading provider of quality vocational education and training (VET). Annually, over 20,000 students benefit from access to over 150 programs, providing them with the opportunity to develop new skills and further career choices. TAFE provides vocational education and training incorporating strong foundation skills to meet competitive employment and workplace requirements and standards. National and International policy discourse has emphasised LLN skills development as necessary to safeguard productivity and the achievement of national health and wellbeing along with economic goals (Hanushek, Schwerdt, Wiederhold, & Woessmann, 2013).

TAFE offers an enrolled nurse training program at the Diploma level to equip learners with the skills and knowledge they need to succeed as a nurse. TAFE entry requirements stipulate school leavers must have completed Year 12 with sound achievement in English, mathematics and computers skills, and that non-school leavers require sound language, literacy and numeracy skills, as well as computer skills. A number of alternative education pathways and bridging programs are offered at TAFE to prepare students for entry into the Diploma of Enrolled Nursing course. These include foundation skills courses and certificate courses.

The language, literacy and numeracy skills essential in nursing are considerable. Enrolled nurses are required to meet registration standards of the Nursing and Midwifery Board of Australia, which specifically state the communication and numeracy skill requirements as well as International English Language Testing System (IELTS) levels. Core skills essential to the performance standard of enrolled nurses in the provision of patient-centred nursing care include: being information technology literate, having critical and reflective thinking skills, ability to contribute to the formulation of care plans, ability to interpret patient’s charts (temperature, pulse and respiration rates), administering and monitoring medication, and knowledge of legislation and common law pertinent to enrolled nursing practice (Australian Nursing Council, 2002). These requirements, vital to National Competency Standards, necessitate a high level of proficiency in language, literacy and numeracy skills and academic achievement.

The competency standards framework adopted by the nursing profession in Australia was premised on a broad notion of competence as a combination of skills, knowledge, attitudes, values and abilities that underpin effective performance in the nursing role (Jones, & Cheek 2003). To become an enrolled nurse in Australia, the minimum level of study is the Diploma of Nursing. The course is delivered through the Vocation Education and Training (VET) sector. TAFE offers the Diploma of Nursing, which is aligned with the Australian Nursing and Midwifery Accreditation Council (ANMAC) National Competency Standards for Enrolled Nurses. On graduation students can register as an Enrolled Nurse through the Australian Health
Practitioner Regulation Agency. Graduates must complete the equivalent of 1.5 years full time study and are expected to exit with literacy and numeracy attainment of ACSF Level 5.

An ever-diverse nurse student population, however, requires greater attention to varied modalities affecting the learner, instructor, and the educational environment with an understanding that nursing education must provide active learning experiences for all learners which promote critical thinking and analysis and problem-solving skills (Stanley, & Dougherty, 2010).

**Contextualising LLN in Vocational Education and Training**

Increasingly, cultural and social differences are changing the literacy practices of individuals and workplaces. Education and training institutions must respond to the kind of literacy practices that are valued and demonstrate competencies in order to gain affirmation and recognition (Holm, & Pitkänen-Huhta, 2012). Figures drawn from the Australian 2006 Adult Literacy and Life Skills (ALLS) Survey suggest just over 2 million working-age Australians score at the lowest level of literacy and almost 3 million score at the lowest level of numeracy. Individuals with poorer skills are at risk of not being able to participate fully in the labour market, education and training, and social and civic life. Demand for optimal performance in 21st century workplaces has placed a greater need for vocational education and training to meet the needs of learners with low LLN skills. Improving LLN skills is very much framed as an issue of equity and of quality. As such, LLN provision has been an important training focus in the VET sector. In 2011, the Australian federal budget provided funding for language, literacy and numeracy programs across the VET sector (Commonwealth of Australia, 2012). The quality of teaching and assessment, and the appropriateness of teaching and assessment strategies for LLN students’ needs are fundamental to increasing literacy and numeracy skills and vocational training completions (Black, & Yasukawa, 2013). In 2012 the Standing Council on Tertiary Education Skills and Employment released a new foundation skills strategy for adults, which replaced the Language and Literacy Policy of 1991.

In reflecting on what has been done in Australia to address literacy and numeracy requirements and the LLN needs for future workforces, Waterhouse and McHardy (2012), define three generational approaches to enhance the acquisition of LLN skills. The first, the preparatory paradigm, assumes literacy and numeracy are basic skills attained prior to individuals work life (p. 19). Premised on a one-size-fits-all approach, this paradigm assumes students will graduate school with the appropriate foundation of literacy and numeracy skills and thus, are work-ready candidates. A range of limitations is cited in this approach, not the least of which, is that a one-size-fits-all approach does not adequately address the particular needs of individual learners (for instance, the needs of Indigenous students and students for whom English is a second language (ESL) (p. 20). The second generational approach, the remedial (deficit) paradigm is premised on perceived deficits or gaps that need to be addressed to enable effective workplace performance. Waterhouse and McHardy (2012) acknowledge that within this paradigm there is growing awareness that LLN skills need to be
"tailored" or "customised" to meet the particular requirements of the workplace (p. 21). The third paradigm, a developmental systems approach, will be more fully discussed later in this section.

Emerging within the second generational approach, a key concept is the notion that LLN education needs to be ‘built in’ and not ‘bolted on’ (Wignall, 1999) to VET training packages and accredited courses to equip learners with the adaptive skills and knowledge (Skills Australia, 2011). Though the ‘built-in’ approach is widely endorsed, it is recognised that this approach is still not a system-wide reality and integrating LLN skills development in training and assessment practices is not addressed consistently (Queensland Department of Education Training and Employment (DETE), 2011). In an environmental scan of how LLN support was actually integrated into VET programmes across Australia, Black and Yasukawa (2013) found that LLN programs continue to fit a deficit paradigm.

The problem with a deficit approach to LLN skills development is that programs are delivered to fill a gap or deficiency that exists within a learner or group of learners, rather than contextualised as core skills essential to performance and competency standards of the contemporary workplace. As such, LLN is ‘bolted on’ to the course, and individual students are singled out for attendance. The deficit model paradigm has been criticised as a ‘victim-blaming’ process, perpetuating shame, stigma and self-esteem issues for learners, as well as being highly decontextualised and less meaningful or relevant method of teaching LLN skills (Black and Yasukawa, 2013; Waterhouse & McHardy, 2012). Based on the findings of the Australian Adult Literacy survey it has been assumed nearly 50% of adult learners in VET have LLN skills below a sufficient level for the training they are enrolled in (Commonwealth of Australia, 2006). Furthermore, only a small proportion of learners actually end up in specialised LLN skills development programs (DETE, 2011). Conceptualising LLN problems as the deficits of individual students positions LLN skills development on the margins of mainstream teaching. As such, responsibilities rest with the individual to transform, rather than with the transformation of learning frameworks to develop all students’ deeper understanding of the language literacy and numeracy knowledge essential to workplaces (Wingate, 2006).

The term ‘built in’ refers to the integration of LLN support into the teaching of vocational course material (DETE, 2011). A ‘built in’ approach to LLN support is regarded as a positive shift beyond the deficit paradigm as it involves the simultaneous delivery of LLN and vocational skills (Courteney & Mawer, 1995). The ‘built in’ approach encapsulates a social capital perspective focused on learning within a fluid and multi-layered process, without overtly labelling or targeting the core skills capability of individual learners. As such, pedagogy for adult LLN needs to be embedded in contexts of networks, ties and knowledge within everyday social and working life (Taylor, Trumpower, & Pavic, 2012).

A ‘built in’ approach is also regarded as a highly contextualised and situated method that is more meaningful and relevant to the learner (Black & Yasukawa, 2013). Research finds that learners engage more fully in learning when they recognise the relevance of the necessary
LLN skills as critical vocational skills for their future profession (Retford, 2013; Casey, Cara, & Perkins, 2009; Casey, Cara, Eldred, et al., 2006). Appreciation of the contingent and highly-contextualised nature of LLN skills has led to, what Waterhouse and McHardy (2012) have framed as, a third generational approach, a developmental systems approach. This paradigm features open dialogue with a focus on systems and capacity building as a key concept in LLN skills development. Embracing a critical and holistic perspective, workplace literacy and numeracy development is contextualised within the system in which people are working. That is, the systems within which they are required to calculate, communicate and problem solve (p. 25). This approach conceptualises LLN learning, teaching and development beyond the deficits of the individual student, to explore opportunities in multiple ways to give meaning to language, literacy, and numeracy in particular situations.

In practice, however, adult LLN is complex and a developmental systems approach (‘built in’ or otherwise) is difficult to teach. The benefits of a developmental systems approach are not achieved by simply adding delivery of adult literacy and numeracy education to the vocational teacher’s responsibilities. A research report from the UK specified that learners benefit from being taught by teams of staff, each with their own different areas (Casey, et. al, 2006). Similarly, a recent audit of LLN practices at Southbank Institute of Technology (SBIT) found a collaborative approach motivated staff and supported them to better understand the need to apply an integrated approach to developing the core skills of learners within the classroom (Healy, 2013).

A key factor in meeting the needs of learners with low LLN skills in the vocational education and training sector is the importance of building the capability of practitioners in the system more broadly to meet the literacy and numeracy needs of learners, while also supporting specialty pedagogy expertise.

The next section provides a summary of government legislation and policy impacting the provision of LLN and inclusive teaching and learning practices in vocational education and training.
Driven by a need to ensure national employment and economic growth, and to meet the challenges of changing economic conditions into the future, the VET sector has experienced continued structural and institutional transformation. The 2000s saw a number of initiatives to reform education in Australia at state and national levels. Significant to this reform process is the historical background of the Australian Constitution enacted in 1900. This document governs the Commonwealth of Australia and sets out the basis for constitutional provisions between the federal and state governments. The states retain larger responsibilities in education policy and administration. Nevertheless, the provision of conditional grants to the states has provided a means with which the federal government has intervened in education policy. Since the 1970s, the federal government has taken an increased role and responsibilities in the VET sector, especially in terms of sustaining a skilled, national workforce.

Competitive global markets, national productivity and the need for a highly skilled workforce, influenced a move by the federal government in 1992, to put forward a new economic strategy assuming full funding responsibility for TAFE. The strategy was rejected, however, an agreement was reached to establish a national VET system with the enactment of the Australian National Training Authority Act 1992. A second approach was made by the federal government in 1996 for full control over VET and Higher Education across Australia. This proposal was also rejected by the states (Commonwealth of Australia, 2014a). Nevertheless, by means of funding exigencies Commonwealth governments have steadily encroached into this area of state responsibility, with the enactment of a series of federal government laws (iVet, 2011).

Currently federal and state government responsibility and administration in both VET and Higher Education occurs as follows: in the federal arena in 2013, the newly elected Liberal government moved VET from the Education portfolio to the Industry portfolio (Maslen, 2014); the Department of Education, Employment and Workplace Relations being split into the Department of Education and the Department of Employment; Higher Education remaining within the Education portfolio.

In the Queensland arena when the Liberal National Party government was elected in 2012, Labor’s Department of Education and Training, became the Department of Education, Training and Employment (The State of Queensland (DETE Library Services) Queensland Government, 2014). With yet another change of government Queensland now has two education focused portfolios, with separate ministers for (i) Education and (ii) Training and Skills (Queensland Parliament, 2015). In summary, despite the Australian Constitution, VET and Higher Education, as delivered by TAFE, have come under both Commonwealth and State ministerial oversight and funding in ever evolving forms of departmental delegations.
Quality, Standards and Regulatory Presence

Until 2011, state governments regulated and monitored vocational education in their state using the Australian Quality Training Framework’s (AQTF) 12 Standards. Since the introduction of an independent national body, VET has been regulated by Australian Skills Quality Authority (ASQA), whose task is to both monitor the standard of vocational education provided by registered training organisations (RTO), and to also review these providers’ suitability to be registered or continue to be registered. ASQA does this by utilising the VET Quality Framework guided by Standards for Registered Training Organisations 2015 made under the National Vocational Education and Training Regulator Act 2011; the 2015 standards being an updated version of the Standards for NVR Registered Training Organisations 2012 (Shah & Stanford, 2013; Australian Government Department of Industry, 2014; Standards for Registered Training Organisations (RTOs), 2015).

These standards include eight regulatory standards for VET providers (Appendix A); standards which came into effect in January 2015. Particularly pertinent to teaching and learning needs of both teachers and learners are Standards 1, 2, & 3, which focus on: “training and assessment strategies and practices [that] are responsive to industry and learner needs” (Standard 1, p. 13); “developing, implementing, monitoring and evaluating quality training and assessment strategies and practices that meet training package and VET accredited course requirements” (Standard 2 context, p. 18); and “[t]he RTO issues, maintains and accepts AQF certification documentation in accordance with these Standards and provides access to learner records” (Standard 3, p. 19) (RTOs, 2015, pp. 13-19).

Specific for LLN and inclusive support is Clause 1.7 which mandates Learner Support:

- “RTO determines the support needs of individual learners” – in other words requires an initial assessment of LLN and Learning Skills;

- “provides access to the educational and support services necessary for the individual learner to meet the requirements of the training product” (ibid., p.14).

The glossary further defines a breadth of “educational and support services” (Appendix B), some of which include: language, literacy and numeracy as well as study skills programs; learning resource centres; ICT support; programs that are contextualised to the workplace; with flexible delivery and scheduling (ibid., p. 8).

Tertiary Education Quality and Standards Agency (TEQSA)

Until 2012 state governments accredited higher educational programs (from diplomas through to PhDs) and also provided registration for institutions delivering such programs. They did this using the National Protocols for Higher Education and guided by the Australian Universities Quality Agency (AUQA) which conducted audits in an advisory capacity rather than as a regulator (Australian Universities Quality Agency, 2009). However, from January 2012 a new national body, Tertiary Education Quality and Standards Agency (TEQSA) was given regulatory
powers over Higher Educational providers and programs, employing a monitoring ‘protocol’: the Higher Education Standards Framework (Threshold Standards) 2011 (Massaro, 2013; Ministerial Council on Education, Employment, Training and Youth Affairs, 2007). These threshold standards for Higher Education have four domains:

1. Provider registration standards,
2. Provider category standards,
3. Provider course accreditation standards,
4. Qualification standards.

(Commonwealth of Australia, 2011)

TEQSA also “undertake(s) an annual risk assessment of all providers” informed by “three regulatory principles (risk-based, proportionate, necessary)” (Commonwealth of Australia, 2014b, p. 2). Significant for this study, is the importance placed on supporting students by the majority of TEQSA’s twelve Risk Indicators (Appendix D) (Commonwealth of Australia, 2014b).

For those involved in VET and Higher Education, the different standards employed by ASQA and TEQSA are ambiguous, with no clear delineation between the two, particularly where institutions are providing both vocational/training and higher education programs. Some have criticised these standards as Regulatory frameworks rather than guidelines for academic quality; one of bureaucratic ticking of boxes rather than any real exemplification of authentic academic achievement (Massaro, 2013 July; Coates, 2013; Thompson-Whiteside, 2013). Others have questioned how TEQSA can realistically undertake all of its risk and regulatory provisions especially with an avalanche of new private providers entering the sector, and particularly when “Funding is reduced by $3.338m in 2014-15, $7.596m in 2015-16 and $9.999m in 2016-17” (Hare, 2014, para. 5)

TAFE Directors have critiqued TEQSA’s Regulatory Risk Framework as over-regulation that puts an unnecessary burden on educational institutions with a track record of compliance such as TAFE (TAFE Directors Australia, 2013). Consequently it has been mooted that ASQA and TEQSA could possibly combine to form one regulatory organisation (Bray, 2011 Nov., p. 14; Maslen, 2014), although this has also been vigorously refuted (Ross, 2012). Others have critiqued recent amalgamation and reform practices as bringing in less qualified individuals to participate into regulatory organisations, overburdening regulators with a larger clientele, loosening up needed oversight of VET and Higher Education, and as a corollary lowering the quality of vocational, higher education and training in Australia (Massaro, 2013; Noonan, 2014; Guthrie, 2014). In this regard Professor Peter Coaldrake AO, QUT Vice-Chancellor, CEO and past Chair of the Board of Universities Australia states his concern about the diminishing of “brand Australia”:

*With the prospect of new providers, the role of TEQSA is to protect Brand Australia and it will need to ensure there are proper processes for vetting new providers. If there are*
a large number of new providers wanting to get in to the system, that is going to require a lot of energy and resources (cited in Hare, 2014, para. 7)

Complicating the issue of providing quality education to VET and Higher Education students is the necessity to be work-ready, and consequently for courses to adhere to industrial standards. As such, industry stakeholders have had considerable input into the development of training packages.

Skills Councils, Industry Partners & Training Packages

At the national level, the Industry Skills Councils is an influential body that comprises 11 separate industry councils, which are:

- recognised and funded by the Australian Government,
- governed by independent, industry led boards,
- not-for-profit companies limited by guarantee (Industry Skills Councils, 2012).

These councils, as well as representing key industries, are also responsible for the development of training packages which are the skeletal curriculum and assessment frameworks upon which RTOs, including TAFEs, build their vocational courses: certificates and associated units. However, recently there has been some criticism of these training packages. Consequently more stringent reviews of Training Packages have been conducted in 2013 and are presently being conducted as part of the VET reform process (Industry Skills Councils, 2014a; Industry Skills Councils, 2014b). Part of this review process is to inculcate into the vocational training package units, ACSF levels, that is, national diagnostic levels of literacy, numeracy, and learning skills appropriate to each qualification level, from Certificate I through to Advanced Diploma and Bachelor degrees.

In May 2013 one industry council, Business Skills Australia (IBSA), released a training package specifically addressing the ACSF core skills, the FSK Foundation Skills Training Package. The aim of the Package is to integrate the core skills defined by the ACSF – learning, reading, writing, oral communication and numeracy – into vocational training units and courses, based on the requirements of the vocation. The Package provides trainers with opportunities to strengthen students’ foundation skills by incorporating their delivery within training and the performance criteria that are required for work ready graduates (Innovation & Business Skills Australia, 2015).

Despite these important developments and initiatives, the bottom line for optimum learning outcomes of students is funding and availability of highly-trained practitioners and specialist teachers.

Impact of Funding Models

Funding has been a thorny issue for the entire VET sector. Present funding models for VET and Higher Education reforms have theoretical underpinnings based on rational choice theory,
neo-liberal and new right discourses which in the past underpinned first Thatcherism, the New Right movement in the US and then Tony Blair’s New Labour policies of the 1980s, 1990s and early 2000s (Apple, 1995). These are theoretical positions which have been described as supplanting “traditional ideals of personal freedoms and natural rights by a doctrine of freedom of the marketplace” (Livock, 2009, p. 32). As such, knowledge is understood as a commodity (Campbell, 2012), in which educational reforms emphasize managerial and economically driven practices, free markets, individualism and privatisation (Lorenz, 2012).

Given that such choices are made within broader social and cultural contexts, people can behave in counterintuitive and unexpected ways, especially in a complex and confusing social environment (Saunders, 2011; Ryan, 2014). For example, prospective time-hungry and dollar-conscious adult students without the in-depth knowledge of the VET system and funding options could be influenced by low pricing and very short courses to choose the lesser quality RTO. In other words, the economics of the deregulated market have not been effective, and, according to Branley and Hermant (2014), public monies are being wasted by funding "shoddy" training. These market place funding logistics are now forcing TAFE and other more reputable providers to put more and more emphasis on online delivery, with little physical or human resource development to support such delivery (Branley & Hermant, 2014).

Forthcoming in late 2015 will be the findings of a fourth federal parliamentary inquiry into Australia’s technical and further education system launched on 24 November 2014. Earlier inquiries had little positive influence on the VET sector, and particularly on TAFE (Parliament of Australia, 2014):

1. March 2013 (moved by Labour) – House of Representatives Education Committee received 173 submissions, but inquiry stopped without any action when the then prime minister Kevin Rudd called the federal election.

2. December 2013 (moved by the Greens) – Senate Education and Employment Committee into the role of TAFE, partly in response to the campaign “Stop TAFE Cuts” with a report published in May 2014 whose recommendations have largely been ignored, particularly those in regard to funding.

3. February 2014 (moved by Government) – the House Standing Committee on Education and Employment Committee also held an inquiry into TAFE utilising the 173 submissions from the Labour inquiry. Report published Oct 2014 titled “TAFE: an Australian asset” whose recommendations largely reinforced the status quo, unlike the previous report.

Policy tug-of-wars and funding cuts are steadily eroding Australia's vocational education and training sector with an increasing expectation that the market paradigm will dominate the provision of VET in the future. Notwithstanding the importance of public and private levels of funding to achieve industry investment and competitiveness agendas, and also balancing broader social equity issues and benefits provided by the VET sector, critical concerns have been raised about the new demand-driven contestable training market approach. In particular, concerns include the speed of deregulation, statutory arrangements and accreditation, quality in teaching and learning, course content, design and delivery, choice in market demands, ability to provide a full range of education services, trainer competency, casualisation of teaching workforce, student enrolment and retention, and provision of optimal resources (Tapp, 2014; Brown, 2013; Mark & Karmel, 2010). Significantly, emphasis on a competitive training market funding model in the VET sector has influenced the reorganisation of institutional relationships – delivery and assessment of courses and quality assurance mechanisms – with possible adverse consequences for pedagogy and learning (Pasura, 2014 p. 580).
Professional Standards for Further Education and Training

Practitioner teachers

The Queensland Government has commissioned Queensland College of Teachers to create a set of teaching standards especially for Further Education and Training, that is, for VET and vocationally based Higher Education. The driver for these VET practitioner standards was stated in an earlier issues paper as: “inconsistent quality of training and assessment [which] is undermining the integrity and value of vocational qualifications” and that “Practitioner capability is identified as one of the major factors affecting the quality of delivery and outcomes” (Queensland College of Teachers, 2013 Oct., p. 4). Moreover the draft standards document pointed out:

Unlike teachers in primary and secondary schools, further education practitioners have not had national professional standards to provide consistent guidelines and benchmarks. There are currently no state or national registration requirements for trainers and assessors in the further education and training industry. (Queensland College of Teachers, 2014, p. 1)

Adult learning is a dynamic field and a singular method or perspective will not provide all the answers about how adults learn at all ages, in all situations and across all content matter. Based on andragogic principles of adult learning, rather than pure pedagogy, the Further Education and Training standards draw on the overarching principles of Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership Ltd., 2010 Dec.). These include common domains of: Professional Knowledge, Professional Practice, and Professional Engagement.

When comparing the two standards (Appendix C) it is evident that for VET teaching, there is an emphasis on industry knowledge and applied skills required for industry certification, along with identifying and addressing needs of a greater diversity in VET teachers and learners, compared to those in the schooling sector. Unfortunately for the present these standards once fully endorsed will still only be a matter of voluntary implementation. The requirement for Queensland school teacher registration is a 3 year undergraduate course; however presently up until 1 January 2016, across Australia in the VET sector teachers (euphemistically called trainers or practitioners) do not require any form of teacher training if they can show “equivalence”. Even with the ASQA reforms, after 1 January 2016 the minimum teaching requirement demanded by ASQA will be a Cert IV in Training and Assessment (RTOs, 2015, p. 16) which at worst can be delivered and assessed over one weekend and at best as a 6 hour per week for 10 weeks course.

It is important to ask how this kind of teacher training can possibly compare to full time 3 year training required for school teachers, especially in light of the greater diversity both of the VET teaching force and of vocational learners. How can all the professional standards developed
by Queensland College of Teachers be implemented when VET teachers are undergoing such a truncated teacher training course? Has the VET reform process failed to reach its goals?

These questions were addressed by Dr Ian Robertson senior lecturer at RMIT who concluded a detailed analysis of the Certificate IV in Training and Assessment with this statement:

> [T]he Certificate IV in Training and Assessment does not provide the opportunity to develop pedagogical content knowledge … [it] does not embed the opportunity to develop the suite of knowledge bases required for autonomous teaching in diverse and complex environments (Robertson, 2008, p. 19).

**Core Skills and Vocational Training**

Pertinent to this research is the way Core Skills have been delivered as part of the vocational training in Diploma of Nursing units of study, as well as the effectiveness of TAFE’s implementation of the FSK Foundation Skills Training Package delivered in the form of:

a) A Maths Medications Calculations workshop utilising FSKNUM14 – to support the nursing medications unit HLTEN507

b) 123 Pathway Program utilising 5 FSK units – to build Reading/Writing/Digital/Learning skills necessary to succeed in the Diploma of Nursing course; connected to anatomy units, HLTAP 401B, HLTAP501C; Infection control unit HLTIN301C.

Previously developed Core Skills (also termed Foundational Skills) training packages include: Certificate I & II in Skills for Vocational Pathways, Certificate I, II & III in Spoken and Written English, and Courses in Core Skills for Employment and Training. However, these earlier developed Core Skills programs all focus on building generic foundational skills needed for employment, usually prior to commencing a VET course, but do not connect directly with specific units of study from specific vocational qualifications as is the case with the Foundation Skills Training Package. Nevertheless, in Queensland the government training subsidies are more than double for those earlier developed generic Core Skills programs, even though they provide less of a targeted vocational support that will remedy skills gaps linked to each qualification’s LLN spiky profile (Innovation and Business Skills Australia, 2013).

In a move to address concerns to connect LNN directly with specific units, in 2012 Innovation and Business Skills Australia (ISBA) launched a report titled ‘Changes Ahead for VET Trainers and Assessors’, in which it announced,

> As of July 2014 all new and existing trainers will need to hold, or demonstrate equivalent competency for, the unit TAELLN401A (IBSA, 2012, p. 5).

TAELLN401A is designed as a core unit in a revised TAE40114 – Certificate IV in Training and Assessment, providing training to address Foundation Skills in Vocational Practice. As such it is intended to strengthen VET practitioners’ ability to work with LLN specialists to develop and
deliver vocational programs that support the LLN needs of learners (IBSA, 2012). The unit specifically necessitates VET practitioners work collaboratively with LLN specialists to ensure integration of LLN in an inclusive ‘holistic’ approach (Retford, 2013).

Nevertheless, as a result of an absence of cohesive national or state policies, and understanding of professional, vocational development needs specifically targeting adult literacy and numeracy pedagogy, systematic implementation of LLN inclusive teaching and learning programs in the VET sector remains slow. Furthermore, the fact that the aims espoused in the Foundation Skills Strategy have not been achieved is due in part to poor coordination and a lack of significant funding or other resources, which seems to be a common problem not only in Australia but in other developed countries (Brown, & Carasso, 2013; Productivity Commission, 2011; Balatti, Black, & Falk, 2009).

LLN Expertise

As new learner groups seek higher education opportunities, there are increasing demands for LLN teaching experts and pedagogical approaches that recognise and deliver training of necessary LLN skills for nursing and health vocations. Connecting health disciplinary knowledge to everyday knowledge is not a straightforward process, and basic literacy and numeracy skills do not automatically evolve into more advanced skills (Anderson, & Maurice-Takerei, 2012, p. 18). Team teaching or community of practice approaches have evolved, in Australia to the conception of delivering LLN specialist pedagogies alongside vocational training. Team teaching involves the vocational teacher and the LLN expert working together to influence each other’s pedagogy for improved learner and vocational outcomes. Black and Yasukawa (2011) suggest that an integrated approach is also related to a whole of organisation process in which all VET staff are clear about the benefits and importance of an integrated approach linked to strategic planning, funding and resourcing, thus involving a community of practice. Walker (2013) points out that a common understanding of pedagogical approaches, clearly defined roles and shared language in curriculum development is critical to successful community of practice collaborations.

A significant issue, however, is the decreasing availability of LLN expertise and specialists within the VET system to address the needs of LLN learners (Retford, 2013; Perkins, 2009). LLN teaching experts have a range of backgrounds and qualifications, with a large majority holding teaching qualifications (Johnson, 2007). The number of university qualifications specific to LLN, which previously provided pedagogical foundations for adult LLN teacher education, has dwindled considerably in the recent past (Yasukawa, 2010). Furthermore, the availability of LLN teaching experts has been affected by funding constraints, the casualisation of the workforce, the requirement for teachers to be qualified to deliver accredited training, and increased competition deriving from the proliferation of providers (Mackay, Burgoyne, & Warwick, 2006). Teachers’ employment security and the culture of the workplace in which they are located have significantly limited the influence of LLN experts on teaching practices, and the adequacy of approaches to integrate LLN skills into core vocational training. Therefore, VET
policy requirements that all trainers and assessors address LLN as part of their routine practice (Service Skills Australia, 2014), necessitates practitioner teachers to pick up the role of facilitating LLN skills development (Queensland Government, 2011).

Haines and Brand (2000) noted that without strong leadership, expertise and skills the development and integration of LLN skills into core vocational training will remain ad hoc and fortuitous. While it is important to support professional development of VET teaching practitioners to manage language, literacy and numeracy issues in the classroom, a distinction should be made between classroom support and specialist language, literacy and numeracy pedagogies that incorporate learner-centered collaborative teaching practices.
Demand for Nurses

The nursing workforce is an indispensable component of the health care system in Australia. The skill mix, practice environment and number of nurses have been significantly associated with affecting the safety and quality of patient outcomes (Jacob, McKenna, & D’Amore, 2013; Twigg, Duffield, Bremner, Rapley, & Finn, 2012). Australia employs two levels of nurse education (registered nurse and enrolled nurse) with different role expectations. Enrolled nurses are considered faster to train and cheaper to employ and are mainly trained in VET Diploma of Nursing programs. Health Workforce Australia (2012) has alarmingly projected shortages of 20,079 nurses in 2016 rising to 109,490 in 2025. To meet an increasing demand for nurses in the health care system there is a need for significantly improved training capacity that can meet the needs of nontraditional student cohorts (e.g. older students, students from low socioeconomic backgrounds and students from non-English speaking backgrounds).

As a practice-based discipline and simultaneously a health science and an applied science, pedagogies for nursing education need to impart ever-changing health science knowledge, clinical practice skills and critical thinking while inculcating an ethos of caring and ethical behaviour (Long, Thomas Lawrence, et al. 2012). Nurse education has typically consisted of two pedagogical approaches: didactic lecture style teaching, and practical demonstration. Didactic education is used to impart clinical health science content and is traditionally carried out in a default pedagogy using lectures, textbooks and PowerPoint slides. Practical procedures occur in the variety of clinical environments or simulations where student nurses provide patient care in hospital wards, nursing homes, or community health settings with workplace or teacher supervision. Experiential learning in real settings is advocated as a necessity in nurse education to enhance desirable skills in moral agency, relationship, perceptual acuity, skilled know-how and narrative reasoning about particular patient transitions (Benner, 2000). Pedagogical approaches to develop students’ critical and higher order thinking skills are understood as essential to foster, and continually reinforce life-long learning in practice in the nurse education literature (Burrell, 2014; Kaddoura, 2011). Views of academic/practical-nursing dichotomies remain a particular challenge related to the enrolled nurse educational preparation as a point of entry into practice (Miers, 2002).

Key stakeholder groups have called for greater definitions of the enrolled nurse scope of practice and educational approaches to prepare ‘work ready’ enrolled nurses (HW2025). The enrolled nurse role in the workforce is seen to vary depending on economics, workforce shortages and quality issues. Over the past decade, significant changes have occurred in educational preparation of enrolled nurses to meet requirements for a mix of skills utilising pragmatism and practicalities (Jacob, McKenna, & D’Amore, 2014). The progression of enrolled nurse education to a diploma level in the VET sector has resulted in significant changes to curricula of skills, knowledge and critical thinking abilities to meet the requirements of the Australian Qualification Framework Council (2011).
educational preparation of registered and enrolled nurses in Australia, Jacob, et al. (2014) specified enrolled nursing programs are targeted at students who had lower academic backgrounds, while the curriculum content of VET Diploma and University Degree programs were similar. Low participation levels in enrolled nurse courses, lack of support and quality gaps in VET educational preparation that meet the complexities of nursing practice have been raised as areas requiring further attention and development (HW2025).

**Motivation and Expectation**

Student motivation and expectation of the skills required for a nursing profession are important determinants to inform recruitment and retention strategies of nurse students. Previous studies have identified student decisions for choosing a career in nursing which include having a rewarding vocation, stepping stone to another career, economic security, previous work or socialisation experiences, job satisfaction and the desire to help others (Jeffreys, 2012; Eley, Eley, Bertello, & Rogers-Clark, 2012). The altruistic prospect to care for others is still a key reason for individuals choosing a career in nursing, despite recent developments as an academic discipline (Perry, 2012; Eley, et al., 2012). Course content and training in Diploma of Nursing courses are generally assumed to be more task-oriented rather than academic. Nevertheless, the changing nature of enrolled nursing programs increasingly necessitates students adopt self-directed learning and adapt to academic standards and new technological challenges (Jacob, et al., 2014). Recognising and addressing these issues in relation to the LLN needs of enrolled nursing students may enhance TAFE’s recruitment and retention strategies of students in enrolled nurse programs.

**Summary**

As a leading provider of quality vocational education and training TAFE has an important role to play in addressing issues in relation to the LLN needs of enrolled nursing students. For VET generally, improving LLN skills is increasingly pertinent to building the capability of enrolled nurses to meet an increasing demand for nurses in the health care system in Australia. Despite policy reforms and consensus that LLN support should be integral to teaching in VET programs amongst stakeholders in Government and the VET sector, an integrated approach is still not a ‘system-wide reality’. That is, LLN skills development is not consistently embedded in the contexts of networks, ties and knowledge within everyday social and working life.

Notwithstanding the importance of funding to achieve industry investment and competitiveness agendas, and also balancing broader social value and benefits provided by the VET sector, the changing nature and recruitment of students with little prior academic background necessitates engaging revised learning frameworks. Such frameworks need to focus on developing all students’ deeper understanding of the language literacy and numeracy knowledge essential to the enrolled nurse scope of practice. Critical concerns have been raised in the literature and reports about practitioner-teacher training and qualifications, restrictive training packages, and the reduction of specialist LLN teachers and support services
necessary for the individual learner to gain competency in LLN skills and meet registration standards with the Nursing and Midwifery Board of Australia.

The following section of this report examines the LLN and Inclusive Teaching and Learning Practices in TAFE’s Diploma of Nursing (Enrolled/Division 2 Nursing) at the time of the study. The key purpose of the study was to make recommendations for improving inclusive teaching practice and learning outcomes of students and for reducing student attrition, thereby increasing the employability of graduates in the health industry subsequent to course completion. The study identified key areas and characteristics that support or inhibit positive and supportive teaching and learning environments for LLN & inclusive learning in the Diploma of Nursing course.

The findings contribute to a relatively small but growing body of knowledge highly relevant and desirable to the VET sector, namely:

- the kinds of LLN skills required for successful completion of the Diploma of Nursing and subsequent employment in the health industry;
- the strengths and weaknesses of inclusive and embedded support currently and typically in place in TAFE;
- the influence of LLN skills on classroom teaching and learning experiences.
The Research

Aim

The aim of the pilot project was to explore the current practice of LLN and inclusive teaching and learning in TAFE’s - Diploma of Nursing (Enrolled/Division 2) course, and to make recommendations on how and when to best support the teaching and learning of inclusive and embedded LLN. The key purpose of the study was to make recommendations for improving inclusive teaching practice and learning outcomes of students and for reducing student attrition, thereby increasing the employability of graduates in the health industry subsequent to course completion. The Diploma of Nursing has a high proportion of English as second language students, as well as students with limited prior education experiences. These issues were raised by TAFE as concerns affecting student retention and employability.

Research Design

Education and vocational training operates within a wider political context and encompasses varied levels of individual experience within a teacher learning community. Toward this, the study comprised three components underpinned by a qualitative approach (i) an appraisal of recent research, policy and literature, and a review of documents pertaining to the course; (ii) observation of teaching and learning in classrooms; and (iii) structured interviews with teachers and students.

Conceptual framework

This research was framed by a social view of learning (Pellerin, 2013; Singh, 2012) and literacy practices (Gee, 2015; Street, 2000). This perspective suggests that learning is an active process that is situated within social and cultural contexts. These contexts influence, and are influenced by, the learning and the learner. In an inclusive classroom, didactic transmission of knowledge does not constitute learning, but rather learning is an active process of engaging with one’s prior knowledge, with others and with the materials and spaces within which the learning occurs (Ryan, 2008). Opportunities to connect with, conceptualise, analyse and apply new knowledge are paramount in this socio-cognitive view of learning (Kalantzis, & Cope, 2005) and constitute the literacies of any discipline (Freebody, Maton, & Martin, 2008). The disciplinary focus is significant as the ways of knowing and doing differ across disciplines. This disciplinary focus highlights the importance of embedded literacy skills within courses, as opposed to generalised and abstract literacy programs. This concept has strong parallels with socio-cultural frameworks of literacy pedagogy such as Freebody and Luke’s (1990) Four Resources Model of literacy, central to educational reforms in Australia. Freebody and Luke note that effective literacy pedagogy includes a repertoire of practices that are inclusive of all learners, contexts and modes of textual production and consumption (see also Macken-Horarik, & Morgan, 2011).

In inclusive classrooms in health related courses, learners should be engaged in learning activities that teach them to break the codes of texts within the discipline, participate in the meanings of health-related texts, use texts functionally as nurses, and critically analyse texts to
understand wider implications for health practice (Ryan et al, 2012). Explicit attention to codes and conventions of health-related texts and contexts is essential, yet on its own is not sufficient. Understanding such texts and contexts in relation to one’s own background, experiences and current situation, and having the skills and knowledge to use these understandings in practical ways is crucial for health literate individuals. Of course, the three resources of code breaking, making meaning, and pragmatic use, do not occur in a vacuum. Health literate professionals must also be aware of the impact of their choices and understandings on others, whether they have the best information for their situation and what other alternatives they may have. Inclusive pedagogy, therefore, develops active, critical and reflective learning.

Scope of the pilot project

The investigation explored the relationships between the provision of LLN in the Diploma of Nursing (Enrolled/Division 2 Nursing) and learners’ achievement, retention and attitudes to LLN. The focus was on educational improvement, specifically related to increasing literacy and numeracy skills and successful vocational training completions. Key characteristics for successful learning environments for LLN & Inclusive teaching and learning were identified through a qualitative approach to the study.

The scope of investigation included the following:

- Reviewing current institutional data sets to determine enrolment trends, cohort descriptors, and student attrition issues.
- Reviewing current institutional provision for LLN student support.
- Reviewing LLN-specific support versus demand components embedded in course material and teaching resources.
- Observing classroom teaching and learning to find evidence of LLN supported/embedded practice.
- Exploring the attitudes, perspectives, values and views of teachers and students regarding the impact of LLN learning and support on classroom success and course completion.

These research questions guided the study:

RQ1: What are the system wide arrangements influencing LLN and inclusive teaching and learning in the VET sector?

RQ2: What factors support or inhibit positive and effective teaching and learning environments for LLN and inclusive teaching and learning?

RQ3: What are the assessment practices and teaching and learning determinants of course success or failure?
Methods

Data collection strategy
To address the key research questions of this pilot investigation, the data collection strategy included:

1) Reviewing de-identified TAFE documents relating to the course,

2) Directly observing classroom teaching and learning, and

3) Interviewing current teachers and students, both withdrawn and enrolled.

With assistance from TAFE Portfolio Manager: R&D LLN Inclusive Practices & Retention, documents were sourced, de-identified, and provided to the research team for review. Additionally, teachers and students of the Diploma of Nursing course were provided Information Statements, via TAFE email lists, about the pilot and its purpose, and were invited to participate. Voluntary consent was received from all participants/stakeholders prior to data collection.

Documentary review
Course documents were provided by TAFE for review. These documents included unit outlines for the preparatory course 123 Program, course guidelines for enrolled nurse units HLTEN506B, HLTEN507C, HLTEN508B, HLTEN513B. De-identified student enrollment data was also provided.

Classroom observations of teaching and learning
Five classroom observations with five teachers, respectively, were conducted to gain an overview of the typical arrangements of teaching and learning within the course. The units represented in the observations were core units. Observations were a minimum of one hour in length, and occurred at the start of the teaching day at either 8 or 9am. The observer arrived prior to the start of the class and sat at the back right hand corner of the class, furthest from the entry and the seats typically taken by students.

The observations focused specifically on LLN and how this may be affecting and impacting teachers and learners in the nursing classroom. The classroom observation was designed to assist the research team in identifying the presence of pedagogy desirable in adult learning contexts, the LLN demands of the lesson being observed, teacher skill in communicating LLN-rich content to students, and student engagement with the vocational content within the classroom.

An observation schedule (Appendix E) was developed by the research team based on the work of other observational LLN studies and reports in vocational education (Benseman, Sutton, & Lander, 2005; Casey, et al., 2006; Livock, 2015). The schedule was designed to draw the observer’s attention to five key areas indicated by the literature, relating to inclusive and LLN-supported adult learning classrooms. They are outlined below:

1. Physical environment and teaching resources
Prior to the observation the physical arrangement of the classroom was noted (e.g. student desks, teacher desk, placement of whiteboards, TV’s, notice boards, windows, doors, etc.). In addition, any LLN-related resources that were present in the classroom were checked and noted (e.g. computers, writing/reading materials, calculators, dictionaries, reference materials, 3D or pictorial models, posters, etc.). As students entered, their gender was noted and an X was placed on the desk at which they sat. If students entered after the lesson start time an L (indicating “late to class”) was placed next to their seated position and their time of arrival was noted. The letter ‘T’ represented the teacher and his/her general position and movements while teaching were indicated by arrows.

2. Inclusive LLN-supported learning engagement

The literature reviewed indicated that teachers who are attempting to create inclusive and LLN-supported teaching and learning tend to demonstrate the following behaviours and attitudes (Benseman, Sutton, & Lander, 2005; Casey, et al., 2006; Livock 2009):

- open and inclusive about backgrounds, interests, family
- casual in the classroom and use of non-school behaviours (e.g. use first names) in order to create an adult context
- connect to students’ individual interests, personal circumstances, and experiences when possible
- provide opportunities for students to exercise autonomy
- inject humour into lessons
- affirm and provide feedback to students
- allow students opportunities to bring up issues
- seize teachable moments if and when they arise

3. Patterns of learner and teacher participation

Elements of sound pedagogy must be present in any teaching and learning situation if it is to be effective. The observer took note of how the teacher delivered and structured instructional sessions, and how learners were invited to engage in the process of learning. Embedded LLN demands and support within lessons were also noted.

4. Questioning with a specific focus on LLN-support (i.e. balancing support with challenge)
Questioning should strike a balance between simple recall or closed questions (e.g. what, who, where, and when?) and challenging open-ended questions (e.g. why, how, what if, what makes you think?). In an inclusive and LLN-supported adult classroom, there should be gaps for students to respond, and answers, when given, should be viewed as potential teaching moments. Questions can be directed to individual students as a way of involving them, or can be offered competitively to the whole class. Summative or review questions are particularly important (e.g. so what have we learned today?). Overall interaction patterns of teacher question and student answer, student question and teacher answer were observed in the classroom observation.

5. Running account of what’s happening

A noted running account of the lesson as it unfolded was also undertaken. This included noting what the teacher was doing and what the students were doing at a given time during the hour-long observation. This provided a record which could be reflected on following the observation to help complete the schedule and provide the research team with examples from the classroom from which to form conclusions.

Examples of each of the five key areas were sought and noted during the observation time.

Teacher Interviews

Individual audio-recorded interviews with the five teachers, who had been observed teaching, were conducted to gain teacher perspectives. The interviews were approximately 30 minutes in length and were structured to allow teachers enough scope to share their current classroom practice and experience, and raise any issues that may be affecting unit success, course completion, and subsequent employment in the health sector following training. The interview questions were developed based on other research in the vocational LLN area using interviews as a means of data collection (Benseman, Sutton, & Landor, 2005; Casey, et al., 2006). The interviews allowed teachers an opportunity to add to the classroom observation by explaining, from their own perspectives, what is happening in the classroom regarding current teaching and learning of students requiring LLN support, and for the research team to explore teacher values, teaching styles, needs, ideas, and practice in relation to LLN support.

Withdrawn Student Interviews

Individual audio-recorded interviews were sought with students who had begun their Diploma but had left the course prior to completion. Students (n=48) who withdrew from the course met the criteria and were emailed an invitation to participate. When no responses were received, a subsequent invitation was emailed with a $10 gift card incentive if they would agree to speak with the research team about their decision to withdraw. One withdrawn student agreed to an over the phone interview. Questions were based on other LLN VET sector studies, and developed by the research team (Noonan, et al., 2013; Wignall, 1999; Balatti, Black, & Falk, 2009; Wheelahan, & Moodie, 2011).
Enrolled Student Interviews

Individual audio-recorded interviews were invited, via email, of students who were likely to graduate, i.e. they were in their final semester of the course, had passed final assessment, and just prior to their last practicum which they deemed they were likely to pass. There was no response to the initial emailed invitation, so a research team member attended a whole-student-group final exam feedback session at Campus A to present an in-person invitation to students about the research and its purpose, in addition to the offer of a $10 gift card incentive. 17 students agreed on-the-spot to be contacted personally about being interviewed, 15 interviews eventuated. An in-person presentation was requested by the research team for the Campus B, following the successful take up at Campus A, but students had already concluded their classes and were at home awaiting their practicum placements, affording no additional opportunities to invite students to participate. Questions were developed based on other interview data from studies of LLN observation, inclusion or difficulties in adult education. The interviews were approximately 30 minutes in length, and semi-structured so that students could share their lived experience of the Diploma of Nursing course and how their learning had, or had not been, supported.

Research Ethics

Ethical clearance to conduct the project was sought and provided by QUT’s University Human Research Ethics Committee in 2014 and signed off by TAFE Executive Director, Education and Commercial. The research team adhered to the ethical requirements of the review, whereby all interview and observation data were collated and stored according to recognised protocols, with secure storage of electronic data, including password locking of electronic files.

Recruitment and consent

TAFE research collaborators assisted with recruitment of research participants. TAFE contacted potential participants via email and through targeted contact of specific participant groups (e.g. teachers of units selected for classroom observation, etc.). Four participant groups were approached. These included:

- Participant Group 1: Vocational Teachers
- Participant Group 2: Classroom Students
- Participant Group 3: Enrolled/Completing Students
- Participant Group 4: Withdrawn Students

The active informed consent of participants was sought and recoded. As part of this process, participants were provided with information about the purpose and scope of the project, the intended outcome of the project and use of findings, the different ways in which they could participate, consent and withdrawal, time requirements and confidentiality (Appendix F).
Within this context, the privacy and confidentiality of individual feedback were maintained and all data were securely stored with access limited to the QUT review team.

Data Analysis Strategy

Document review
Course documents and de-identified enrolment data provided by TAFE, offered a snapshot of

- the LLN needs for current students (BSKB enrolment data),
- participation rates in the 123 Program and quantitative data of students access to Learning Support Services, and
- the LLN resources embedded in the units of Diploma of Nursing (Enrolled/Division 2 Nursing course).

The documentary data were appraised against four components of the TAALLN401A Learners Guide. These were

- the minimum skill level in unpacking LLN within a course material (Standard 7 of AQTF)
- fairness of assessment requirements (Standard 8 of AQTF)
- materials appropriate to the LLN of the vocational competence (Standard 9)
- identification of learners’ LLN competence

Classroom observations
Classroom observations were analysed by comparing the five completed schedules across classrooms. By summarising the key observations within each of the areas framed by the schedule, commonalities and differences in the classrooms were established and used to inform some preliminary impressions of the practice of LLN and inclusive teaching currently occurring in TAFE nursing classrooms.

Interviews
Interview data were partially transcribed (i.e. sometimes word-for-word or noted in a more concise summary form) from the audio recordings and responses from each participant were listed below each question. In this way, the range of responses to any one question could be viewed at a glance, and answers that were repeated or common could be easily identified and grouped. Repeated readings established common themes amongst participants.
Part two. Findings

The second part of this report focuses on the findings of the study. Findings are presented in three broad sections, each of which examines in detail the course documents, the observations from classrooms, and what the teachers and students said about key dimensions of LLN and inclusive teaching and learning practice in TAFE’s Diploma of Nursing (Enrolled/Division 2 Nursing). The broad sections are indicative of the influential arrangements for successful teaching and learning practices current at the time of the research. These are:

- System wide arrangements influencing LLN and inclusive teaching and learning in the VET sector,
- Factors that support or inhibit positive LLN and inclusive teaching and learning,
- Assessment practices and teaching and learning determinants of course success or failure.
1. System wide arrangements influencing LLN and inclusive teaching and learning

This section examines the arrangements influencing LLN and inclusive teaching reflecting on system wide provision. For example, teachers and students discussed qualities relating to students’ motivation to undertake the course, the course prerequisites, requirements and LLN skill level, and the administrative system and policy reform around the course as more universal aspects that influence learners' success in the course. This section also presents data drawn from course documents to situate the specific arrangements for LLN learning current at the time of the study, in broader perspectives of LLN skills development.

Why did you choose to do a Diploma of Nursing?

When answering this question, many of the students interviewed in the pilot study cited compassionate reasons such as, wanting to help people. A student explained,

Yeah after seeing the nurses and what it was like, oh they're so nice and they were really caring and I thought I just want to do that as well. (141010_002 ES)

Another student shared,

I wanted to expand my skills and go into nursing. I actually started doing that when my son was diagnosed with leukemia. I actually got a bit of hands-on in nursing and just enjoyed it. I know it sounds probably really weird, but enjoyed doing it, so I wanted to take it further. (140915_001 WS)

Other reasons students gave included personal development, upgrading skills, good rewarding payment, emotional fulfilment, family aspirations and to inspire their children. A student broadly explained:

I thought I wanted to do something that would make me feel - I don't know it would give me a profession. (141014_003 ES)

Many of the students described the Diploma of Nursing as a pathway to eventually completing a degree qualification at university, and achieving their professional aspirations as a registered nurse. The following is the description one student gave of her study pathway. She said:

Then after I'd finished my course (Certificate III in Aged Care), then I just went okay let's do nursing now. That was a fourth step into getting into nursing, I think, because they didn't recognise my schooling back in the Islands. (141027_013 ES)

Another student who identified that English was a second language, discussed undertaking the Diploma of Nursing course at TAFE as an opportunity to ‘test’ herself in the role of nursing.

On thinking about diploma or go to university but, because I never touch this area before. So I think I maybe have a test, so I do diploma, to figure out if I like it or not. After I do this, I found
out that I pretty (much) enjoy nursing ... this kind of thing, so I thought oh that's fantastic. (141017_11 ES)

Generally students perceived the course to be more hands on than a university course, providing a grounded opportunity to explore their fit in the role of nursing and to gain confidence in developing new skills.

So I talked to a couple of friends of mine who were nurses to find out what would suit me. They put me forward to enrolled nursing because it's more hands-on than clinical, whereas the RN is a bit more on the management side of things. (141015_005 ES)

Course entry prerequisites

TAFE Queensland Brisbane’s entry requirements stipulate school leavers must have completed Year 12 with sound achievement in English, mathematics and computers skills, and that non-school leavers require sound language, literacy and numeracy skills, as well as computer skills. The Australian Core skills Framework (ACSF) describes the level of performance in core skills essential to communicate effectively in a variety of situations and to think critically about information and ideas. The Table (Table 1) below outlines the prerequisite level required for the Diploma of Nursing.

<table>
<thead>
<tr>
<th>Qualification code</th>
<th>Qualification title</th>
<th>Reading ACSF Level</th>
<th>Writing ACSF Level</th>
<th>Oral Communication ACSF Level</th>
<th>Numeracy ACSF Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTS1612</td>
<td>Diploma of Nursing</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(but spikes to 4 for some units)</td>
</tr>
</tbody>
</table>

Table 1 Level of core skill required for program of study from ACSF Qualification mapping matrix

Students offered varied answers about the prerequisites they required for entry into the Diploma course. One was unclear she said,

No. It wasn’t very clear. No. (140915_001 WS)

Some students assumed there were no prerequisites for the course, a few said the satisfactory completion of year twelve was needed, and others described gaining entry through
recognition of prior learning. Most students who described recognition of prior learning had successfully completed the Certificate III in Aged Care. One student said:

I did a Cert III in Aged Care, which automatically gave me a head start because I did a Cert III Aged Care pathway to nursing. (141017_010 ES)

Another student described obtaining her Certificate III through a bridging program while completing her year twelve schooling. She said:

So I went every year of schooling and I did - I did my Cert III in aged care actually in Year 12 - while I was in Year 12. Then I came - I actually did it at this campus, then I came straight to here from school and did my Diploma. (141017_008 ES)

English and numeracy skills level at the start of the course

In the interviews, some students described sitting a test at the beginning of the course. In fact, all students were required to do the Basic Key Skills Builder (BKS) assessment in the orientation week of the course. The BKS assessed students English and numeracy skills at Level 4 ACSF. The cohort invited to participate in the research scored between 14% to 66% success on the literacy test, and 14% to 87% success for numeracy at Level 4 ACSF. A learning support teacher facilitated the test and later discussed the outcomes with individual students and options for support during their course. One student explained:

So after you’ve enrolled you get an orientation week and they speak to you this is what nursing is like, it is like this, it is full on. It is – you know, like seven units in a semester, it’s pretty heavy and if you can’t do it leave. If you don’t love nursing, this is not the job for you. If you’re doing this as a pathway to get to Uni and do law, it’s not for you, don’t bother. (141017_009 ES)

Overall the students interviewed seemed somewhat unclear about the prerequisites for entry and the academic demands of the course, specifically in relation to language, literacy and numeracy skills, as well as the level of computer skills required. Interestingly an ESL student believed there were no English language requirements for entry into the course. She explained:

Yeah I thought that way too, and I did my [IELTS] test, I think I need to pass 6.5 overall score. Is English test, and then I pass it and I came to here and they say no you don’t have to, you just pay the money. I thought oh really, because I pretty sure about university you have to pass English test to show you have the ability to cope with the course. But not here, so I was quite surprised yeah. (141017_011 ES)

The results of student BKS assessments were available to teachers through a shared course data storage drive. In the interviews one teacher discussed accessing the BKS data, she said:

So the results give me a rough idea of who’s going to pass and who is not. (140826_005 T)
In general, however, teachers were not cognisant of the availability of the BKSB data. One teacher said:

*We don’t get an overview of the student. There is that BKSB that they sit, but we don’t always get to hear about those results.* (140807_002 T)

Overall teachers believed that students English and numeracy capabilities were below the level of performance essential for the academic requirements of the Diploma of Nursing course. One teacher stated:

*There is a clear deficit in their academic abilities.* (140806_001 T)

Students’ language, literacy and numeracy competencies required further development. Teachers’ perceived the LLN deficiencies led to students becoming frustrated and often dropping out of the course. Yet, strategies to identify the limitation or barriers that students might have to learn effectively, and to determine appropriate teaching methods or techniques to help students counteract limitations were not, in general, perceived by the teachers to be their responsibility. One teacher clearly stated:

*No I don’t see it as my role in class.* (140821_003 T)

**Administration systems and the impact of policy changes**

During the period of the study there were a number of identified pressures on teachers and students associated with recent policy reforms, namely Queensland’s Higher Skills Program Policy 2014-15. The reforms brought about significant changes to the governance arrangements of three former independently administered TAFE campuses, which saw them combined into one administrative system, TAFE. In relation to the provision of LLN support the availability of learning support staff through the Learning Skills Centre was decreased at Campus B from four days a week to one day a week, and at the Campus A staffing levels were reduced from two support teachers and two tutors to one support tutor. An online support service was introduced and administered through a third campus. Library staff reported at the time of the study no Campus A students had availed themselves of this service. Staff expressed the view that for this cohort initial support needs to be face-to-face to build student confidence in accessing additional forms of support.

The amalgamation of TAFE institutions under new governance arrangements was remarked upon as adversely impacting teaching, administration and vocational placements. One student observed:

*There’s been a big turnover of teachers... The amalgamation has affected it heaps, but I’d say that prior to that the lack of organisation was still there. Sometimes we’d wait a while before we got a response about something that we needed to know earlier... Confused. Are we doing this now? Oh no. Okay cool let’s continue in doing what - like it’s confused..."*
Eventually we got through it but ultimately there was a lack of organisation, especially not amongst the teachers but amongst the facility itself. (141017_010 ES)

Teachers also talked about the need to improve coordination and organisational arrangements across TAFE. One teacher lamented the lack of communication across the TAFE community of practice. She said:

The systems don’t talk to each other– enrolment, grading, vocational placement system – very difficult processes to work in. (140826_004 ES)

She went on to explain in further detail the concerns she had about administration and enrollments, saying:

I always have to check their enrolment (they have to re-enrol every semester) – the admin side of it is quite large – we rely on admin to separate the students in their class groups… we don’t know how many we’re going to get until they start getting enrolled again. So, sometimes you end up with 40 in one class and 6 in the other… There’s uncertainty for the students – they want to know day one which class they’re in and who’s my teacher. (140826_004 ES)

Another teacher raised the importance and challenge for TAFE to recruit high quality students and preserve a share of the training market under the new demand driven system. She said:

I think we have to be aware of what the other RTOs are doing. Because other RTOs are doing an interview process, they’re going to take the cream – and those who weren’t successful – are we taking those? Are we taking people who are employable, intelligent enough? (140807_002)

Teachers perceived competition from other RTOs had resulted in cuts to teaching staff and resources, as well as adding pressure to retain and progress an increasing number of graduate students. Money was seen as a key driver in the new vocational education and training ‘market’, and as a driver was understood as somewhat incompatible to teaching and learning goals (Branley, & Hermant, 2014). One teacher stated:

We are now in a contestable market that comes back to money. Why would you enroll, pay $21K for a course that will take you 18 months, when you can enrol in xyz, a private RTO, pay $15K, get an iPad, and a 2 week holiday in Vanuatu. We all know the devil is in the detail, sometimes you don’t always get what you pay for. When you have a clever marketing campaign to sell a product, people don’t see through it. If we say to students you have to do this, they vote with their feet. We’re caught between a rock and a hard place. Management say to us we need to meet quotas, this isn’t cost effective, there’s cuts already with the amalgamation of TAFE – the whole VET system has changed to being a contestable market, it’s all about money. So to try to appease students, assessment items get altered. Have we done ourselves a disservice? (140806_001 T)

Other teachers suggested:
The students are always right because the students are paying the money. (140806_001 T)

I take issue with taking money from people who were probably never going to pass. (140807_002 T)

Concerns raised suggest that the recent deregulated market emphasis in VET funding arrangements is influencing the quality of services provided to students, reduced the support available to students with LLN difficulties, and within the new governance arrangements accountability is determined by student quotas and monetary concerns more so than, teaching and learning practice and outcomes, a point also argued by Noonan, Burke, Wade & Pilcher (2014).

Learning Support, Library Resources, Foundations Programs and the Classroom

Drawing upon the course documents, and the classroom observations the current arrangements for the delivery of LLN skills development were examined. Current language literacy and numeracy and inclusive teaching and learning practices require support and resources for optimum development. This section considers the support provided to students through the Learning Skills Centre, library resources, FSK foundation programs and in arrangements within the classroom.

Learning Support and Resources

Learning support and library resources offered students opportunities to acquire and develop their study skills. A teacher provided a summary of the services on offer, saying

The Learning Skills Centre in the library – that’s one of the most common [program within TAFE for LLN support]…assessment help, editing, setting out paragraphs, referencing and for counselling and disability assistance. (140826_005_T)

Students were clearly aware of the support and resources available to them. One student summarised,

There’s heap of support through the library and the learning skills. A lot of the teachers were happy to help out if you needed it. There are lots of resources on the database. So I think everything I found was really accessible to me and that was pretty clear. It wasn’t difficult to find things that I needed or to understand certain criteria or anything like that. (141017_012_ES)

Apart from general library staff at Campus A there were two learning support teachers and two tutors, and at Campus B one learning support teacher. Support teachers worked from classrooms within the two libraries. The availability of this learning support decreased during the period of the study. TAFE records suggest that 75% of the student cohort across the two campuses accessed the services offered by the Learning Support staff. When the teachers were asked Do you refer students to other programs or services within TAFE for LLN support?, the Learning Skills Centre, otherwise referred to as Learning Support was high on the list of services and programs teachers said they recommended. One teacher said,
I have written in my comments on their assignments “Please seek support from Learning Support” – but they should know all that – through their orientation. (14821_003_T)

Nevertheless, some teachers believed students did not follow up the services offered through the Learning Skills Centre. A variety of reason for this were given including,

Learning support services, to the library – students don’t want to go there even though it’s available because they don’t think they should have to… In lots of cases students don’t go to it [orientation/support services] because it’s wasting their free time – that’s the attitude. (140806_001_T)

Learning support has a bit of stigma – like a disability support – for slow people. (140826_04_T)

Opportunities, strategies or processes of interaction and collaboration between teachers and the learning support staff to support students’ acquisition of academic and core skills were not discussed in the interviews.

Student testimonials suggested Learning Support was mostly useful for their learning, one student shared:

I used it a couple of times and it was really good. (141015_004_ES)

However some students did not find it helpful, possibly as an effect of the reduced capacity of support and pressures on staff. As one student said:

I’d go in there and say: ‘can I have an appointment to see you to ask questions about this?’ - and they would say: ‘Come back at 2pm’ but I’d have class at 2pm – they were never available when you needed to see them and they were just rude. (141015_005_ES)

For many students the provision of extra-curricular learning support conflicted with work and family commitments. Some students indicated they did not use Learning Services, however, the resources of the library were discussed more generally as useful and necessary. One student stated,

No didn’t use the support services. I’ve been through a lot personally in the last two years I’ve been at TAFE, but I never used their counselling service. I did use the library a lot because I can’t afford the internet at home. The library was fantastic, it could do with a few more computers and definitely a few more nursing text books, but other than that, yeah used the library a lot. (141014_003_ES)

Although technology is an indispensable requirement for student learning and to enhance core skill development, the fact remains that many VET students do not have personal access to these resources. Indeed, as implicit in the previous statement, there was a shortfall in the provision of these essential learning resources at TAFE.
Course work materials were available from the student Learner Portal for each unit. These included the PowerPoint from lessons, student activity sheets, medical terminology, some glossary of terms and links or references to health and competency guides. For the most part these resources were text based and offered limited LLN resources and references. Examples of some forms of LLN textual features included:

- HLTEN506B Weekly Activity Booklet –text based with some images and graphs used, and prompts for students to create their own Glossaries (Appendix G);
- HLTEN507C Worksheets and crosswords- provide revision text based worksheets and weekly crosswords with key terms (Appendix H);
- HLTEN513B Competency Guide- text based booklet with information to LLN support services, recommended texts and references, and suggested study timelines (Appendix I).

Students indicated the course materials accompanying the curriculum were useful to progress academic development in the course. One student remarked,

*I'd never done anything so academic before... They did provide us with materials or guides, if you like, to stuff like academic writing, or the appropriate referencing for assessments. They gave us marking criteria for most assessments, so you could refer to the back of your assessment and make sure that you've crosschecked and you've done everything that's required. So I think they gave us ample material, I don't think that was really a problem.*

(141017_012_ES)

A maths workshop and the 123 Pathway program

Following the BKSB assessment delivered in the orientation week of the course, enrolled students were expected to complete two-foundation units to improve their LLN skills. The foundation units were based on the FSK Foundation Skills Training Package, which supports the integrated delivery of foundation skills and vocational skills and knowledge to enable learners to achieve vocational competency. Each unit was matched to the FSK guidelines.

1. Maths Medications Calculations workshop
   Corresponding to the FSK Unit Code
   FSKNUM14 - Calculate with whole numbers, familiar fractions, decimals and percentages for work.

2. 123 Pathway program: get ready for Health Studies – a pathway to the Diploma of Nursing
   Corresponding to the FSK Unit Codes
   
   Digital Learning FSKDIG03 – Use digital technology for routine workplace tasks
   Reading FSKRDG02 – Read and respond to basic workplace signs and symbols
   Learning FSKLRG11 – Use routine strategies for work-related learning
   Reading FSKRDG10 – Read and respond to routine workplace information
   Writing FSKWTG09 – Write routine workplace texts
The TAFE Portfolio Manager in consultation with teacher practitioners developed the above LLN units. The Maths Medications Calculations workshop was developed to support nursing medications unit HLTEN507, and the 123 Pathway Program supported the anatomy units, HLTAP 401B, HLTAP501C; and the Infection control unit HLTIN301C.

Students who had commenced in January 2013 were offered the Maths Medications Calculations workshop between semesters in June and July before they commenced 2nd semester prior to the unit HLTEN507C Administer and monitor medications in the working environment. The maths workshop was also offered just before the HLTEN507C exam in September 2013 and was only offered at Campus A. A total of 43 students attended out of an enrolment of just over 120 students.

The 123 Pathway Program was offered at two time points for the student cohorts who participated in the study. The first was held in January 2014 and ran for 4 hours each day over 14 days [56 hours total]; one class was held in the morning at Campus B taught by a LLN teacher with a nursing teacher assisting and being mentored. The nursing teacher then taught a larger combined afternoon class with the assistance of another nursing teacher. The LLN teacher with no assistant teacher offered an afternoon class at the Campus A. A total of 108 out of 140 enrolled students attended this program; 75 of the enrolled 96 students from the Campus A and 33 of the enrolled 44 students from the Campus B. The second session held in July 2014, was only held at Campus A but open to students from both campuses. It was only delivered by the LLN teacher. This session was provided for students commencing their program as a mid year intake, thus the cohort was much smaller, with 13 students enrolled in the program. It was held over 10 days /4 hours per day [40 hours total].

These two units fulfilled the Australian Skills Quality Authority standards by implementing an upfront LLN skills building model as well as a short foundation skills training workshop during enrolment for the Diploma of Nursing.

LLN-supported resources in the classroom environment

The classrooms observed consisted of a ‘traditional’ layout for classroom teaching. That is a main desk at the front of the room, a board and student desks facing the front. The observer noted,

Students and teachers position in the classroom at entry remained fairly static during class (i.e. students at desks, teacher out front near a whiteboard). There was little in the way of LLN type materials in the classroom observed for the study (e.g., reference materials, student computers, informative posters, 3D models, etc.). Teaching resources employed consisted chiefly of computer driven PowerPoint slides, YouTube video, whiteboard markers to write on board, and a laser pointer to point to slides. There was one exception. One teacher used butchers paper and pens to do a small group task.

Students brought very few materials to class to support their own learning (e.g., laptops, textbooks, writing materials). Very few students took notes during class time.
While separate units have been developed to meet the LLN needs of learners connected to vocational skills and knowledge in the Diploma of Nursing, the classroom environment suggests there is space for improvement to ensure a developmental systems approach in the provision of LLN skills and inclusive teaching and learning.

Summary

Students, for the most part, choose the Diploma of Nursing course as a pathway to eventually completing a degree qualification at university. The Diploma of Nursing course was perceived by students to offer a grounded opportunity to explore their fit in the role of nursing and to gain the academic skills required to achieve their professional aspiration. At the start of the course, many of the student’s BKSB results indicated their core skills were below the level of performance required for the program of study. Teachers professed LLN deficiencies led to students becoming frustrated and often dropping out of the course. Therefore, it is imperative that training is inclusive of all learners (Macken-Horarik & Morgan, 2011) and core skills are contextualised in the academic complexities of nursing practice (Long, Thomas, Lawrence, et al., 2012). Building capacity and system-wide inclusive educational and LLN approaches is vital to augment recruitment and retention of students in enrolled nurse programs through TAFEs, and thereby ensure the work-readiness of graduates in the health industry.

The findings suggest that a number of system-wide arrangements can positively influence LLN and inclusive teaching and learning. These include the provision of essential learning resources (both within and external to the classroom), academic and LLN specialist learning support staff, and inspiring a community of practice to support students and foster their learning. The FSK Foundation Skills Training Package was influential in developing a successful upfront teaching and learning approach, which connected students to learning support and library resources.

Conversely, the findings also indicated a number of recent policy reforms and funding arrangements that have negatively influenced LLN and inclusive teaching and learning. An emphasis on deregulation and contestable-markets for the VET sector adversely affected the quality of services provided to students, reduced the support available to students with LLN difficulties, and impacted coordination and organisational arrangements across TAFE. Significant concerns were articulated around new governance arrangements determined by student quotas and monetary interests more so than teaching and learning practice and outcomes.

Commitment to systems thinking (including by policy-makers and funders) and strategies for example, the developmental systems model (Waterhouse, & McHardy, 2012), are required for optimum LLN and inclusive teaching and learning arrangements.
2. Factors that support or inhibit positive LLN and inclusive teaching and learning

Boore and Deeny suggest the curriculum framework in nurse education should include three key focus areas: 1) philosophy, values and definitions of nursing; 2) models and philosophies of the education of nurses; and 3) standards and benchmarks for the regulation of nursing (2012). The Diploma of Nursing curriculum at TAFE is delivered over three semesters and consists of twenty-nine core units and five elective units. Each semester includes vocational placement in an industry environment totalling 400 hours. Each unit provides students with skills and knowledge in nursing practice covering topics such as anatomy and physiology, the Australian health care system, infection control, chronic health problems, effective communication skills, legal and ethical parameters, medications, wound management, acute health problems, and palliative care. The curriculum at TAFE was delivered through a training package mapped to the ANMAC National Competency Standards for Enrolled Nurses, and mostly consisted of pre-prepared PowerPoint slides.

Content Heavy Courses

Most participants interviewed in the study noted the length of time afforded for the course, and the sheer volume of the content as issues impacting teaching practice and learning outcomes of students.

The classroom observations indicated some variation in individual teacher approaches to the content delivery, however, teacher-led lectures using the pre-prepared PowerPoint slides as the prompt was the primary teaching strategy. As such, the teacher instructed at the front of the class, and the students listened. Teachers primarily referred to PowerPoint slides with little deviation from the content. The observer noted the following.

Content of the units were standardised across classrooms – black text, green headings, dot pointed or paragraphed content. Students’ background knowledge or experiences, which are important for teaching culturally and linguistically diverse students (Cramer & Bennett, 2015), were not markedly incorporated into the lessons observed. Class time consisted mainly of teacher-led transmission of information rather than more inclusive student centred practices such as group work, multi-sensory approaches and active student participation (Singh, 2012; Cramer & Bennett, 2015). Students were free to raise issues but tended not to. Almost exclusively whole group question and answer techniques were used to move through the content of the slides. Answers mostly came from teachers themselves by way of explanation. There was no specific requirement for students to answer as indicated by the lack of response time provided. Even in one classroom observation, where some small group work was on offer, students seemed unsure of the expectations and were explicitly directed by the teacher.

One teacher explained she used varied techniques in her teaching approach (though these still suggest a teacher-led approach) to deliver the content, and indicated students needed to seek further support outside of the classroom. She said:
I try not to dumb it down – I present to the middle road because otherwise it won’t be reflective of the workplace... I try to make the environment comfortable and open for question asking. I try and encourage them... The content in Chronic is tough. I try to include YouTube video, PowerPoint, simulated, formal, worksheets. I stress to get support, but I am not an English teacher. (140807_002_T)

The timeframe for content delivery was a key concern for most teachers and students. While discussing aspects of the course that were difficult, an ESL student said:

“It’s just really dry and teachers have really short time to teach it. I mean we do have six hours per week, but it’s only 10 weeks, and 11 systems and every system is important. You’ve got to learn it and understand and memorise. You forget everything after you finish the class and next week they say do you still remember the last system, I thought no, no. (141017_011_ES)

Another student commented,

“It really is... it's really compact. So it's a lot of content to get through in the year-and-a-half. I didn't quite expect that it would consume so much of my time outside of school. (141017_012_ES)

Teachers emphasised the importance of getting through the pre-packaged content in the classroom to ensure students could pass the assessments. This appeared to be at the expense of projects and activities that could provide students with opportunities to learn and engage with the content at a reasonable pace (Ryan, 2008). One teacher shared:

We skipped a lesson during the [first] week so I ended up rushing. Normally teachers would skip that lesson. I’m still rushing through the content we missed on that week because I don’t want to skip it. Because they’ve got an exam and anatomy is one of the difficult subjects, so I would like to teach them. So faster-paced than normal. (140826_005_T)

While the curriculum framework is designed to meet the National Competency Standards, implementation and the time afforded to work through the content in the classroom is limiting the flexibility and responsibility of teachers’ to make pedagogical decisions based on the minute-to-minute and day-to-day needs of their students. A teacher described the importance of critical skills for nursing, nevertheless intimated these are not emphasised in the curriculum framework implemented in the classroom.

Even though they are adult learners in an adult environment, they still need that higher level of LLN to be a nurse. Critical thinking, planning, time management... hard to teach in classroom setting but critical. (140826_004_T)

Death by PowerPoint

The highly structured curricula implemented through the PowerPoints evidently generated problems to meet the needs of diverse learners and the production of meaningful learning experiences. The data suggest that students often felt ‘bored’ and disconnected from the
classroom and their professional aspirations to become a nurse, which is a real danger with teacher-directed and content-focused approaches (Kalantzis, & Cope, 2005). Both teachers and students remarked upon the lack of pedagogic variety afforded as a result of the highly structured curricula. A student reflected:

A lot of the time it was death by PowerPoint, actually the majority of the time it was death by PowerPoint, but you kind of get used to it, because when they are doing their PowerPoints, and for me I would print out my PowerPoints so I’d already have a general idea, and I’d only write what she was saying, what extra examples that she would say that were not on the PowerPoints. (141015_006_ES)

A teacher highlighted the volume of content in the PowerPoint as an issue. She said,

The power points are shocking especially the Chronic class. I have 4 hours and some of those sessions have 6 PowerPoints, with 40 odd slides each, per PowerPoint…(For the students, it is in one ear out the other! (140821_003_T)

Another student described teaching herself as more satisfactory than attending the classroom. She said,

I’ve learned that I don’t enjoy being in the classroom, I’m much happier to be at home and go through the course content myself and I sit there with a nursing dictionary and the things that I don’t understand that the teacher would normally explain what things are, I would just go to the dictionary and teach myself. (141014_033_ES)

Students noted that teachers had different teaching styles, but rarely did they use pedagogical strategies other than teacher-led delivery of the PowerPoints. One student explained,

It’s different for every teacher. Some teachers will try to interact and teach from their experience, some teachers will just read off the PowerPoint and students will fall asleep… Very rarely we would do an activity (other than using the PowerPoint), but that’s a really rare occasion. (141015_004_ES)

In further discussion this student described her idea of what good teaching and learning experiences in vocational training should be. Her notion espoused professional motivation and aspiration. She said,

(Teachers) that encourage the students and that are passionate about nursing, because these (teachers) are supposed to be nurses that are teaching us. If we have teachers that are not passionate about nursing, why would we want to go on with nursing? (141015_004_ES)

A disjuncture appears to exist in the curriculum framework designed to meet the ANMAC competencies and standards, and the teaching and learning flexibility needed to engage alternative vocational pedagogical practices (Cramer, & Bennett, 2015). Within the highly
structured curricular approach prospects are limited to incorporate active learning engagement strategies and to integrate the language, literacy and numeracy skills essential to the performance standard of enrolled nurses in the provision of patient-centred nursing care.

**Teacher-led classroom approach**

During observation of the classrooms a number of factors were identified that inhibit or support positive teacher and learner interactions for LLN and inclusive learning. Elements such as relationship building, reciprocal responsibility for teaching and learning, questioning, establishing links between topics, real world practice, prior learning, group learning and varied activity were noted in patterns of learner and teacher participation, which are necessary elements for inclusive teaching and learning achievement (Cramer, & Bennett, 2015; Tran, 2013). Nevertheless, as noted earlier the primary teacher-led classroom approach, highly structured curriculum, and tight timeframe provided little instance to accommodate alternative inclusive approaches or experiential learning environments to cater for diverse needs. One teacher indicated,

*We only cater for one or two learning styles – all lecture style. We don’t have time for group work.* (140806_001_T)

Students in the study provided feedback on the didactic lecture style of teaching and discussed other pedagogical practices that enriched their learning experiences. One said,

*There’s been problems with certain teachers, not them on a personal aspect, but their teaching methods. Some teachers are very PowerPoint-based, reading the PowerPoints and that’s it. And me, personally, because I’m a visual and hands-on learner, reading and hearing words to me doesn’t mean a lot. So some teacher’s style didn’t suit me, but I was lucky to be able to take that knowledge and find a way to make it work for me, and most of my teachers have worked for me, so I’ve been lucky.* (141010_001_ES)

Many students identified themselves as pragmatic learners and discussed the importance of practical and direct approaches to link learning and content to their individual understanding and the development of skills. A student explained,

*I liked the practical things and when, for example, in Acute and things, they would go around the room and stick a big piece of paper on the wall and everyone would go in groups and brainstorm what you know around there. Or [teacher name] would put a student in the “hot seat” and ask questions, and we’d have to raise our hands if we agreed or disagreed, we’d get points. It sounds childish but with something hard like Anatomy – it makes it fun.* (141015_005_ES)

Another student said,
Other teachers, even in meds, would pull out all the syringes so that I could look at and visually see what I was doing, not just looking at a picture, bring all out and sit down with me. I think that’s really – you know – the teachers that will put in the extra help – those who will actually take the time. (141015_005_ES)

These more practical and action based classes inspired a collaborative culture and enhanced practices by which the students recognised learning as enjoyable rather than a chore.

Summary

A range of factors that support and inhibit positive LLN and inclusive teaching and learning in the Diploma of Nursing were evidenced in the study. Whereas a competency based approach might afford shorter training programs and address national concerns of shortages of qualified nurses in health care (Steketee, Lee, Rogers, et al., 2013), explicit attention to inclusive student centred practices and active student participation were acknowledged as factors that support learning, but seemed to be restricted in the competency based approach to the curriculum.

Staff and student comments revealed prevalent concerns about the suitability of the standardised pre-packaged content of the course. Students assumed the course content and training offered in the Diploma of Nursing would be more task-oriented rather than academic. Yet opportunities to participate in the production of meaningful learning experiences, to use texts functionally as nurses, and critically analyse texts to understand wider implications for health practice (Ryan et al, 2012) were minimised in the content-focused approaches. The teacher-led transmission of information embodied a range of problems to balance the demands of competency based training with the existing skills, experiences and knowledge of learners.

There is great scope to increase flexibility in delivery, participation and engagement, to the benefit of individual students and to positively support LLN and inclusive teaching and learning in the classroom and not only as upfront or extra-curricular activities.
3. Assessment practices, and teaching and learning determinants of course success or failure

Literature and theory related to adult education practice accentuates the value of teaching and learning through problem-based, experiential learning and collaborative methods rather than didactic approaches to increasing literacy and numeracy skills and vocational training completions (Black & Yasukawa 2013). Pedagogical approaches that transform the classroom setting into an environment that encourages student engagement, and appreciation of the multiple ways to give meaning to language, literacy, and numeracy in workplace situations is imperative in nursing education (Burrell, 2014; Waterhouse, & McHardy, 2012; Kaddoura, 2011). The beliefs and attitudes of teachers are an important element in the development of varied modalities, which incorporate student interests and experiences in learning. This section examines the data to understand how the teaching practice and learning outcomes were shaped and examines fundamental aspects identified to support course success in the educational preparation of enrolled nurses.

Assessment

A number of contentions were raised related to the assessment requirements of the course. A key issue emergent in the data relates to the high stakes and consequences of the cluster system examination. A teacher described the cluster system and suggested it was an unsuitable measure of the critical and reflective thinking skills vital to the competency standards required for nursing and other professions (Ryan, 2015). She said,

We have exams (multiple choice) divided into 5 clusters, we have 5 questions per cluster, to be successful in that cluster you must get 3/5 correct. Some students have achieved 5/5 right for multiple clusters. They might get 100% on 11 clusters and then on the 12th cluster they only get 2 out of the 5 questions right and they’ll fail the exam... Another student can get 3 questions right across every cluster. That demonstrates to me that we accept 60% as being acceptable. I’ve had a student that has got 100% in every cluster except one and now they are unsuccessful – unfair!

I don’t feel this programme fits with the VET training system. I’ve seen some very diligent students miss one cluster by one question, for whatever reason and they’ve been unsuccessful. Other students just scraped through, they’ve plagiarised their assignment, etc.... The student says ‘I’ve put in all this hard work, and I have to repeat the subject?’ What do you say to that! It’s a heart breaking position to be in. You see these students put in so much time and effort. This sort of assessment doesn’t fit with the sort of people you want to turn out at the end. We don’t do a GPA an average, you are either competent or not. This is fine if you’re “training” but there’s a big difference between training someone and educating them. You can train a dog to sit, but you can’t “train” them to ask “why do I have to sit?” – it’s that critical analytical thinking. [140806_001_T]
There was also suggestion by teachers that specific content areas of knowledge students are being assessed for is, often not relevant to the integration of knowledge and skills within nursing practice. A teacher shared,

_They don’t need to know some cardiac drug is a protein pump prohibitor. I’m a registered nurse and I don’t know that – so they’re failing on information that is not even relevant to the workplace._ (140821_003_T)

Failing the cluster system exam has important disadvantages, such as being forced to redo classes and the expense of further tuition costs until the test can be passed and accreditation gained. The line between passing and failing seems not to be indicative of the students’ capacity to apply their knowledge and learning to practice. Illustrating the problem with the competency assessment system a student portrayed her knowledge of students progressing to a Bachelor of Nursing course, despite their inability to pass the cluster system. She said,

_I have two friends, people I met at TAFE. They came right through to the end of second semester and then failed. They failed medications based on the cluster system. They just sort of went ‘stick it to TAFE, stuff yers, this is a bullshit system anyway’. They went straight to Uni and got in based on a partially completed qualification…one of my friends…she’s doing better at Uni than she did at TAFE and Uni is supposed to be the harder one._ (141014_003_ES)

Students and teachers discussed concerns about the grading criteria and assessment processes that don’t necessarily support students’ improvement in essential literacy and writing skills, or academic development. One teacher shared her view that the exams and assessment do not provide relevant evidence of the students’ capacity to analyse and synthesise information and concepts, rather than just recalling information.

_A lot of the exams and assessments are structured around the worksheets. That’s it. -But I incorporate readings from the textbook. To have a thorough understanding, you need to demonstrate deeper knowledge around say a stroke, not just go on to the Stroke Foundation website. That’s what (students) want but online does not give you current clinical manifestations, terminology, treatments, nursing._ (140826_004_T)

Teachers discussed examples of the students’ literacy and academic knowledge and skills. One said,

_There are some times I’ve written comments on a paper for a student’s assignment that are more than what the student has written in terms of their submission._ (140806_001_T)

_Another explained,_

_They (students) don’t know how to reference or paraphrase… I’ve assignments I can’t read, the grammatics are disgraceful. I cannot read it. I say re-submit and it comes back like a professor has written it – so I have no idea who wrote it._ (140807_002_T)
The dissolution of the licence to use the resource Turnitin by TAFE was a concern for teachers assessing assignments. Turnitin is an educational software application that supports management of the submission, tracking and evaluation of student papers online and provides a plagiarism detection service. Of concern was that assessment practices can become less rigorous and require more teacher time in marking. A teacher explained,

_We have huge problem with plagiarism – they don’t know how to reference or paraphrase and (the assignments) are not going through a system such as, Turnitin, it’s now been dissolved_ (140807_002_T)

Further points related to plagiarism and the level of English comprehension were made by another teacher, who said,

_I got an assignment back last week and I failed the majority – just on the info not being there. Some of the English, oh my goodness, all of it was out of the textbook. But as soon as they put it in their own words you can barely understand it._ (140821_003_T)

The drive to increase, retain and progress students was also cited as a problem in which assessment practices are, not only the learning driver for students, but also a measure of accountability for public funds. One teacher shared,

_Our hands are tied, we’re not really allowed to fail assignments if they’re not referenced correctly but they have to put referencing down. It is not a strict referencing system._ (140807_002_T)

Students discussed their desire to only be provided with what is important in the assessment and ways in which teachers should ‘teach to the test’. That is students preferred teachers to summarise the extensive curriculum content in lessons congruent to the assessment topic areas. One student said,

_When exams are on, they’ll (teachers) specify or focus on what will be on the exam – and that really helps. Because I remember in semester 1 we asked if they could just give us some areas so that we really know what to focus on. It is hard to take everything in and some teachers would say just study everything and you’ll be right. We don’t want to know the answers we just want to know the areas, what body system they’re going to focus on or whatever. Whereas in semester 2 or 3, we had some really nice teachers, they’d say this is a bit of a cheat sheet. ‘We’re going to give you the areas we want you to focus on.’ There is just so much content, sometimes you might only get 2 weeks to study all that._ (141010_002_ES)

Another student further detailed the ‘teach to the test’ practice. She said,

_The teacher really wanted me to know this answer because it ended up being on the exam, but she didn’t want to say that. She was like “[student name], please re-answer this” – she really went through it and said “you might really need to know these things”._ (141015_005_ES)
While some students perceived that the teachers helped to align learning with the assessment measures, some student’s discussed being discouraged by the curriculum and assessment framework as a stimulus for learning. One student said,

_We’re not treated well, there’s no encouragement there at all. They’re (teachers) like: ‘60% of you will fail’, so that encouragement is not there. So you feel like you’re on your own and really, sometimes we’re like, why are we even coming to class when the teachers just read off the PowerPoints._ (141015_004_ES)

Another student said,

_They were reading out the assignments and they said: “You need to be able to spell”… I wanted to do it so I just kept on working hard, working hard, working hard at it and it’s like, well, I’ll just support myself._ (141015_004_ES)

This student also highlighted inconsistencies in teachers’ marking criteria, as did others. She said,

_The marking system was unfair. For example the assignments, different teachers mark them different – so you might give an answer on an assignment, another student from another class may give the same answer - one will mark it wrong, the other will mark it right._ (141015_004_ES)

**How teachers teach**

In interviews with students, good pedagogical practice was perceived to make a difference to the content delivery a point iterated by Tran (2013). One student shared teaching methods and pedagogy that she believed helped to improve her engagement and learning across the course. She said,

_We got a new teacher, she was amazing, she whipped our butts into shape, she taught us how to study, did flashcards and mind maps - that I still use now. She really helped us, not only for Anatomy, but (also) for study really._ (141015_005_ES)

One teacher described the limited direction she received as a new teacher and the absence of a collaborative culture with colleagues and professional development. She said,

_(It) would be good for TAFE to allow a bit more sharing, especially if you’re new, you’re pretty much thrown in, here’s your subjects, here’s your class, go teach it … Would be nice to be able to observe other teachers, what the expectation is of us, what the students are used to._ (140821_003_T)

To achieve an integrated LLN approach, teachers expressed the need for additional support to improve inclusive teaching practices, such as: broader teacher professional development; collaboration between teachers; and better access to resources and support across the system. One teacher expressed the view that content and LLN are separate areas of professional expertise,
I can teach content - I can’t teach basic maths, basic English, structuring sentences with verbs and adjectives and what have you. That’s what I can’t do, I don’t have time to do that and I’m not expert in that. (140807_002_T)

Personal experience and teacher student relationship fostered a platform from which students take on responsibility for their own learning. As was indicated in the following student’s discussion about teaching methods and pedagogy.

That’s the classes we enjoy – we’re getting something out of it then rather than sitting there like this (bored) and to be honest with you, one time I was sitting there and I could feel myself dozing off because I was getting nothing out of it at all, and that’s not me, normally I’m really alert, but I almost went to sleep, I felt my head drop, and I thought this is ridiculous! So what are the things the teachers did that really made the lessons come to life? When they’re explaining something it’s good when they can give a scenario from the workplace and put it in context. With one particular nurse, we’re always (excited action) so what did you do, what happened on the weekend (at work)? She’ll tell you or show you pictures – it’s just awesome. It just makes us want to keep going. (141010_002_ES)

The course doesn’t prepare you, but the teachers do

Many of the students discussed characteristics of good teachers and gave examples of what made good teachers. Many of these attributes align with the productive Pedagogies framework developed in a Queensland Department of Education (1999) longitudinal study. Attributes such as passionate, experienced, encouraging, interactive, approachable and knowledgeable were perceived to be key elements that distinguished good teachers who were able to prepare the student for a nursing vocation. Several students explained,

I really like that they are still working and they can relate it back to what happened in their job. You know, ‘if you were out here you’d do it like this’, or ‘it will be different when you work in other places, just learn it like this and go with the flow. Look at how they’re doing it, their policies and procedures’ – that real life touch. (141015_005_ES)

Reiterating the notion of nursing as a socially embedded practice (Brenner, 2000), another student said,

They were passionate, their experience was amazing and they knew what they needed to put forward; because we do have teachers that are very academically way up there, but unfortunately when it comes to the teaching there’s nothing there… If (the classroom) was just academic teaching… no, but if it’s the experience plus the academic teaching 100% (success). Like I said, if there was just a plain teacher who could tell you anatomy and physiology back to front, inside and out, and then you go to the hospital, I’d be like there’s no interaction between me and the patient because I wasn’t taught that. I only get that from the teachers and how they’ve interacted - through their good experiences and bad experiences. I learn from that, textbooks don’t teach me that. The teachers who just read off a textbook I don’t get that either. (141017_010_ES)
Students indicated that they learn best, through a supportive and encouraging environment and more specifically when the teacher assists them to work in ways best suited to their individual preferences. A student explained,

There were teachers who were determined to have their whole class pass exams, you could tell from day one: “No one is failing this class (clapping hands), no one is failing this class!” They were always positive and if you needed help they would take time out of their lunch to sit down with you and say: “Now, what don’t you understand? How can I help you?” And they would go through step by step by step to make it clear to you. There were only a few classes where I thought: “Oh my goodness, I’m lost” but it was always those teachers who would sit down with me and say “OK this is how we do it, this is what I mean, no, it’s OK, you will get…” They were always reassuring, and I did get it, they were right, I did get it in the end. (141015_006_ES)

Good teachers were perceived to adapt their pedagogy to meet the diverse needs of the students and convey sound nursing practice rather, than only accentuating the transference of decontextualised content.

How learners learn

While the students who were interviewed generally found the Learning Skills Centre helpful, some shared other practical strategies they used to help them with vocational LLN learning, including using google or YouTube to clarify information, and forming peer support networks to capitalise on the social aspects of learning (Gee, 2003; Pellerin, 2013). An ESL student explained,

I had to catch up a lot actually, the English is not the general English we use in everyday life - the pronunciation is different – but I found out not only me but some natural born [English as first language students] – they still have struggle with it. So I felt – that’s OK, I have my study group. We are four girls who study together. We work in our way, and we study really hard in this group. We always email teacher if we have some questions to ask. (141017_011_ES)

Peer support groups enhanced the development of learning and understanding for these students. They recognised that their learning was enriched by working together to construct knowledge from the course content, and by using their own sentences and writing structure, a strategy advised by Azer, Guerrero, and Walsh (2013). A student explained her learning strategy was to memorise new words and simulate practice involving friends and family at home. She said,

Basically chatted to other students who could give me a different perspective and I would actually play a lot of games at home and I would make up little games and scenarios and acronyms just to make it all stick. (It) made no sense to anyone else, but that’s what I needed to do. I’d make my friends come over, we’d have a few wines and I’d make them play games. (141010_002_ES)
As previously considered under the Course entry prerequisites section above, many of the students indicated the level of skills required to meet the academic demands exceeded their expectations and skills level. It was not surprising that students praised the stand-alone support that they received during the course to expand their study skills in areas such as writing structure, referencing, and using tools such as computers and Google search.

I’m a very big advocate for the Learning Skills Centre, the Learning Support service in the library, they’ve helped me so much and they just don’t get enough praise from me. There are so many things I didn’t know, like on the computer, I didn’t know about Googling properly – you have to do a whole sentence (laughing). Just little things that have made each step go (forward). (141015_006_ES)

Another student said,

I can definitely say that if the Learning Skills were not there, I would not have made it. They started from the bottom with me, my sentencing structure, how to even write a sentence, how to have a topic sentence for an assignment, things like that. What’s a topic sentence, an introduction, a conclusion? (141015_006_ES)

Teachers indicated in the interviews that students lacked study skills. One teacher shared,

I don’t think many people know how to study – I gave them headings to focus their study. (140807_002_T)

Another teacher made a similar observation,

They often have no prerequisites for study – what’s a journal article, referencing. (140826_004_T)

The students’ uses of practical strategies to enhance learning and the development of academic skills, during the classroom observations were minimal at best. Students were witnessed to arrive to class late; remained mostly silent, asking few questions; and note taking or the use of resources such as laptops or textbooks were nominal.

Opportunities to scaffold and embed the acquisition of key academic skills seem to have been overlooked in the classroom. Learners could benefit from strategies to help academic skills become more salient in the classroom and not just through stand-alone or peers supports.

Successful Students

When teachers were asked to describe what makes a successful student, they responded with a list describing attributes and actions they expected of students. These included,

- Submitting on time and passing assignments,
- Attendance,
- Attitude and consistency,
- Interaction in class.
• Note taking
• Willingness to learn,
• Taking part when a teacher asks them to do something,
• Displaying employability skills,
• Feedback/Reflection, because reflection is a big part of nursing,
• Listening, and
• Answering questions, asking questions.

When asked what LLN core skills were relevant to the workplace and employment of the students at successful completion of the Diploma of Nursing course teachers highlighted the importance of critical thinking and analysis. One teacher said:

To critically analyse and think – this is what sets students apart as successful – asking ‘why’ questions. For example, a patient with blood pressure - is it medical? Check the chart. Has the patient been eating, drinking? Check. Are there co-morbidity factors? Having all the jigsaw pieces and figuring it out. Nursing is not a task, it is a bigger responsibility. (140806_001_T)

Being a successful student from the students’ perspective was attributed to determination – you have to be a hard worker; and to nursing being one of those things you have to really want to do. Students also conveyed other important aspects to being a successful student. One student shared,

Going to class, I need to listen to the teacher tell me, I can’t just look at the PowerPoints, I can’t learn like that, and being able to clarify right then and there something new I’ve never heard of and then having the teacher explain it to me in a way that I can understand – I like that interactive learning. (141015_006_ES)

Students also spoke about applying previous life experiences or knowledge to the development of skills such as planning, communicating and self-regulation.

I think life skills and maturity are a big factor. The personal attributes you need to be a nurse are developed over just your general life skills of living and communicating. An adult learning world – having time limits and assignments – you’re responsible for that yourself. (141010_001_ES)

Summary

Evident across the data was a range of issues that affected course success or failure and active engagement of students in the learning process. Some of the concerns raised included prescriptive course delivery, flexibility and variety of pedagogical resources, student motivation, and effective teaching and study methods.

The data related to the assessment practices within the course exemplify a range of problems that require consideration interrelated to the vocational curriculum framework, pedagogy, student expectations, competency standards and policy. The high stakes of the cluster system seemed to unfairly disadvantage student success or failure, highlighting equity issues, and
challenged the importance of assessment practices to promote learning. Problems that emerged include ‘teaching to the test’ and critical issues related to transparency and how teachers develop valid assessment tasks and arrive at reliable judgements of student achievement. There was also evidence that perceived competition in the contestable market approach and commercially-focused accountabilities placed pressure on teachers to retain and progress students.

The complexities of nursing practice, and changing scope of practice for enrolled nursing increasingly necessitates students adopt self-directed learning, adapt to academic standards and new technological challenges. Determinants of course success or failures are dependent on a range practical strategies that can enhance learning and the development of academic skills with a focus on nursing as a socially embedded practice. Good pedagogical practice was perceived to make a difference to the content delivery. Students articulated they learn best through a supportive and encouraging environment and when the teacher assists them to work in ways best suited to their individual preferences.
Recommendations

In considering the main findings of this study this report recommends:

1. Inclusive curriculum and pedagogy needs to be built around diverse learning needs of students. A range of strategies should be developed to accommodate such diversity while not compromising the essential knowledge requirements of the Diploma of Nursing. These strategies could include problem-based learning, group scenarios and simulations, which require rigorous disciplinary knowledge that is applied to a practical problem.

2. The cluster assessment system should be reviewed. A fairer system, which more accurately reflects individual student achievement, should be considered.

3. A multi-layered, contextualised approach to LLN programs should be taken to ensure appropriate support is available and accessible for all students. This approach could comprise three layers: i) existing LLN support programs should be maintained; ii) more flexible one-on-one support should be available for at-risk students; and iii) inclusive LLN practices should underpin pedagogical strategies in all classes.

4. Professional learning opportunities should be provided for all VET teaching practitioners to ensure that they have the knowledge and skills to adopt a range of inclusive teaching practices. These learning opportunities could include: formal professional development sessions that address identified needs of teachers; peer learning approaches; and the provision of resources to support inclusive teaching strategies. Ideally, each teacher should be supported to maintain a professional learning reflection plan in which they can identify their own learning needs in relation to inclusive teaching practices, and reflect on the impact of these learning opportunities on their professional practice.

5. Internal administration systems should be reviewed to ensure streamlined student administration, optimal communication strategies for teachers and students, and equitable access to resources for teachers and students.
Conclusion

The Diploma of Nursing is constituted by high-demand literacy requirements with an expectation that students attain ACSF level 5 on completion of the course. Assessment of literacy and numeracy skills at the start of the course suggested many students achieved less than ACSF Level 4. The introduction of the foundation program in response to the FSK Training Package provided an upfront LLN skills building program as a means to address all students’ foundation skills development in the context of nursing requirements.

While the upfront LLN skills building program was contextualised in the core skills essential to the performance standard of an enrolled nurse, more is required to ensure that LLN skills development is situated and integral to the overall teaching of the Diploma of Nursing course and to achieve what Waterhouse and McHardy (2012) refer to as a developmental system approach. The language, literacy and numeracy skills essential in Nursing necessitate greater attention to varied modalities and the educational preparation that meet the complexities of diverse and individual learners. VET teachers and trainers need to be equipped with the knowledge and skills to enable them to teach a wider range of students at higher levels of knowledge and skill, and also to ensure students have the foundation skills they need (Wheelan, 2011, p. 16). Professional development of VET teaching practitioners to manage language, literacy and numeracy issues in the classroom, as well as increased learner support expertise and collaboration across the curriculum, are critical components required to address the integration of LLN development in the Diploma of Nursing.
References


Black, S., & Yasukawa, K. (2011). Working together: Integrated language, literacy and numeracy support in vocational education and training. Centre for Research in Learning and Change, Faculty of Arts and Social Science, University of Technology Sydney, Sydney


Wignall, L. (1999). Built in, not bolted on. Information kit for language, literacy and numeracy coordinators on incorporating communication skills into training packages. [Washington, DC]: ERIC.


APPENDIX A
ASQA’s Regulatory Standards for RTOs

(Cth.) (Austl., pp. 13-26)

Standard 1.
The RTO’s training and assessment strategies and practices are responsive to industry and learner needs and meet the requirements of training packages and VET accredited courses;

Standard 2.
The operations of the RTO are quality assured.
CONTEXT: The RTO is responsible for developing, implementing, monitoring and evaluating quality training and assessment strategies and practices that meet training package and VET accredited course requirements.

Standard 3.
The RTO issues, maintains and accepts AQF certification documentation in accordance with these Standards and provides access to learner records.
CONTEXT: To maintain the integrity and national recognition of training products, AQF certification must be consistent in presentation and RTOs must accept the certification issued by other RTOs. This is the purpose of nationally agreed requirements about the nature of certification content and presentation and maintenance. Learner needs should be met through timely issuance of AQF certification documentation and access to their records.

Standard 4.
Accurate and accessible information about an RTO, its services and performance is available to inform prospective and current learners and clients.

Standard 5.
Each learner is properly informed and protected.

Standard 6.
Complaints and appeals are recorded, acknowledged and dealt with fairly, efficiently and effectively.

Standard 7.
The RTO has effective governance and administration arrangements in place.
CONTEXT: Operational and financial business standards therefore provide important protective measures for the learner and RTOs, as well as acting as a disincentive for underprepared organisations to enter the market.

Standard 8.
The RTO cooperates with the VET Regulator and is legally compliant at all times.

(RTOs, 2015, pp. 13-26)
Educational and support services may include, but are not limited to:

a) pre-enrolment materials;
b) study support and study skills programs;
c) language, literacy and numeracy (LLN) programs or referrals to these programs;
d) equipment, resources and/or programs to increase access for learners with disabilities and other learners in accordance with access and equity;
e) learning resource centres;
f) mediation services or referrals to these services;
g) flexible scheduling and delivery of training and assessment;
h) counselling services or referrals to these services;
i) information and communications technology (ICT) support;
j) learning materials in alternative formats, for example, in large print;
k) learning and assessment programs contextualised to the workplace; and
l) any other services that the RTO considers necessary to support learners to achieve competency.
### Domain 1 -- Professional Knowledge

<table>
<thead>
<tr>
<th>Standard 1</th>
<th>1.1 Understand the developmental characteristics of learners.</th>
<th>1.2 Recognise and appreciate the diversity of social, cultural and linguistic backgrounds of learners.</th>
<th>1.3 Know the learner's current level of proficiency in the program area.</th>
<th>1.4 Know and understand the principles, frameworks, and theories that underpin effective practice in adult teaching, learning and assessment.</th>
<th>1.5 Understand effective teaching strategies that are responsive to the local community, cultural setting, linguistic background and histories of all learners.</th>
<th>1.6 Understand the range of inclusive teaching strategies that support the participation and learning of all students and address any relevant legislative requirements.</th>
<th>1.7 Know the demands of different learning contexts including training institutions, workplace and community education locations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know the learner, their context and how they learn</td>
<td>1.1 Physical, social and intellectual development and characteristics of students</td>
<td>1.2 Understand how students learn</td>
<td>1.3 Students with diverse linguistic, cultural, religious and socioeconomic backgrounds</td>
<td>1.4 Strategies for teaching Aboriginal and Torres Strait Islander students</td>
<td>1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities</td>
<td>1.6 Strategies to support full participation of students with disability</td>
<td></td>
</tr>
<tr>
<td>Standard 2</td>
<td>2.1 Demonstrate current vocational competence and relevant industry skills in their teaching area.</td>
<td>2.2 Know and understand the content of the teaching program being taught.</td>
<td>2.3 Communicate with learners to promote engagement in the learning activity and an understanding of the content being taught.</td>
<td>2.4 Know and understand the application of strategies for flexible, applied, connected and supported learning appropriate to the content and context of the vocational area.</td>
<td>2.5 Know and understand a variety of effective teaching strategies to support the learners’ language, literacy and numeracy requirements.</td>
<td>2.6 Understand the use of a range of quality resources including technology to support teaching and learning in different vocational learning environments.</td>
<td></td>
</tr>
<tr>
<td>Know the content and how it can be taught</td>
<td>2.1 Content and teaching strategies of the teaching area</td>
<td>2.2 Content selection and organisation</td>
<td>2.3 Curriculum, assessment and reporting</td>
<td>2.4 Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non Indigenous Australians</td>
<td>2.5 Literacy and numeracy strategies</td>
<td>2.6 Information and Communication Technology (ICT)</td>
<td></td>
</tr>
<tr>
<td>Standard 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Domain 2 -- Professional Practice

<table>
<thead>
<tr>
<th>Standard 3</th>
<th>3.1 Plan, design and implement effective teaching and learning programs.</th>
<th>3.2 Select, develop and use a range of teaching strategies and resources including new and emerging technologies.</th>
<th>3.3 Utilise local, national and global content through real and/or virtual environments for learning programs.</th>
<th>3.4 Work with learners, colleagues and industry to develop individually appropriate learning goals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 3</td>
<td>3.1 Establish challenging learning goals</td>
<td>3.2 Plan, structure and sequence learning programs</td>
<td>3.3 Use teaching strategies</td>
<td>3.4 Select and use resources</td>
</tr>
<tr>
<td>Standard 4</td>
<td>4.1 Inspire, motivate and raise aspirations of learners through own enthusiasm and knowledge.</td>
<td>4.2 Establish and maintain positive learning environments.</td>
<td>4.3 Develop and manage engaging, applied, authentic, physical and/or virtual learning environments.</td>
<td>4.4 Plan and deliver effective learning programs for diverse groups or individuals in safe and inclusive learning environments.</td>
</tr>
<tr>
<td>Standard 4</td>
<td>4.1 Support student participation</td>
<td>4.2 Manage classroom activities</td>
<td>4.3 Manage challenging behaviour</td>
<td>4.4 Maintain student safety</td>
</tr>
<tr>
<td>Standard 5</td>
<td>5.1 Work with colleagues and other stakeholders to select, develop and use a range of assessment tools</td>
<td>5.2 Use a variety of informal, formal, formative and summative assessment processes.</td>
<td>5.3 Understand and participate in assessment validation processes.</td>
<td>5.4 Understand and participate in processes to support consistent and comparable judgements of learning.</td>
</tr>
<tr>
<td>Standard 5</td>
<td>5.5 Collect, analyse and interpret formal and informal assessment</td>
<td>5.6 Provide timely feedback to learners, employers and relevant stakeholders about the learner’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain 3 -- Professional Learning and Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Standard 6**  
Engage in professional learning in own vocational area and in adult education theory and practice | 6.1 Undertake continuous professional learning to enhance and develop knowledge of contemporary principles and practices of teaching, learning and assessment. | 6.2 Participate in continuous professional learning to maintain and update subject and/or vocational area knowledge. | 6.3 Engage in professional dialogue with colleagues and other stakeholders as part of a process of personal continuous improvement and professional growth. |
| **Standard 6**  
Engage in professional learning | 6.1 Identify and plan professional learning needs | 6.2 Engage in professional learning and improve practice | 6.3 Engage with colleagues and improve practice |
| **Standard 7**  
Engage constructively with industry, colleagues, community, regulatory and professional bodies | 7.1 Engage with educational, professional, industry and vocational networks / associations in order to keep abreast of contemporary issues, research and practice. | 7.2 Work with colleagues, support staff, industry, community and government agencies to ensure that learning programs and the learning environment, are industry relevant, current and engaging for all learners. | 7.3 Comply with codes of practice and conduct. |
| **Standard 7**  
Engage professionally with colleagues, parents/carers and the community | 7.1 Meet professional ethics and responsibilities | 7.2 Comply with legislative, administrative and organisational requirements | 7.3 Engage with the parents/carers |
| **Standard 7**  
Engage professionally with colleagues, parents/carers and the community | 7.4 Engage with professional teaching networks and broader communities | 7.4 Apply professional learning and improve student learning |
| **Standard 7**  
Engage administratively, organisational and professional responsibilities. | | | |
| | | | |
APPENDIX D

TEQSA RISK INDICATORS for Higher Education Providers
(Tertiary Education Quality and Standards Agency, 2014 March, pp. 10-14)

<table>
<thead>
<tr>
<th>Student Profile &amp; Outcomes</th>
<th>Staff Resources &amp; Profile</th>
<th>Financial Viability &amp; Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cohort completed</td>
<td>8. Senior academic leaders</td>
<td>11. Financial viability</td>
</tr>
<tr>
<td>2. Student load</td>
<td>9. Student to staff ratio (SSR)</td>
<td>12. Financial sustainability</td>
</tr>
<tr>
<td>3. Attrition rate</td>
<td>10. Academic staff on casual work contracts</td>
<td>- Other identified risk</td>
</tr>
<tr>
<td>4. Progress rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Completions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Student satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Graduate destinations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Classroom Observation


1. Physical environment and teaching resources

Arrangement of teaching and learning space

Note any LLN-related resources ✓

- Computers
- Writing/reading materials
- Instructional posters
- Dictionaries
- Calculators
- Reference materials
- 3-D or pictorial models
- Additional support staff
- Whiteboard

Notes:
2. Creating an inclusive LLN-supported learning environment (Tick if observed ✓)

Note any of the following features (or others) observed of the general learning environment ✓

- Open/inclusive about backgrounds, interests, family
- Casual non-school behaviours (e.g., using first names, creating an adult context)
- Connecting to student’s individual interests, personal circumstances, experiences
- Chances for students to exercise autonomy
- Injections of humour
- Affirmation & feedback
- Opportunities for students to bring up issues
- Seizing teachable moments

Notes:
### 3. Patterns of learner and teacher participation (Tick if observed ✓)

<table>
<thead>
<tr>
<th>Generic Teaching (i.e., are the elements of sound pedagogy present?)</th>
<th>Teaching Methods (i.e., how teaching is delivered?)</th>
<th>Student Engagement/Student Contribution (i.e., what are student doing in response to teaching?)</th>
<th>Student LLN Requirements or Competencies (may need expanding)</th>
<th>Specific Teacher LLN Support (i.e., outside of - or embedded within vocational subject teaching)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greeting</td>
<td>Instruction/Explanation</td>
<td>Sitting/Listening</td>
<td>Language &amp; Literacy</td>
<td>1-1 assistance</td>
</tr>
<tr>
<td>Administration</td>
<td>Posing Q &amp; A</td>
<td>Discussing</td>
<td>Reading</td>
<td>Directs to outside support or reference material separate to vocational learning context</td>
</tr>
<tr>
<td>Overview/aims</td>
<td>Feedback/Praise</td>
<td>Asking questions</td>
<td>Writing</td>
<td>Creates opportunity for content area practice/fluency of LLN skill</td>
</tr>
<tr>
<td>Revision/prior learning</td>
<td>Facilitating discussion</td>
<td>Doing a prac</td>
<td>Speaking</td>
<td>Explicit teaching of LLN</td>
</tr>
<tr>
<td>New learning</td>
<td>Roving/supervision</td>
<td>Filling in worksheet/form</td>
<td>Listening</td>
<td>Differentiation according to LLN need within the subject area tasks.</td>
</tr>
<tr>
<td>Session review</td>
<td>Checking/Correcting work</td>
<td>Working on computer</td>
<td>Numeracy</td>
<td>Are the practical activities or vocational content or tasks geared toward or linked to LLN learning</td>
</tr>
<tr>
<td>Planning of future work</td>
<td>Writing on board</td>
<td>Answering questions</td>
<td>Calculation</td>
<td>Does the teacher provide examples from real life/work situations to demonstrate the importance of LLN for workplace success</td>
</tr>
<tr>
<td>Goal-setting</td>
<td>1-1 Assistance</td>
<td>Participating in group work</td>
<td>Measurement</td>
<td>Simple or formative assessment activities to check LLN proficiency for vocational task or content or assessment</td>
</tr>
<tr>
<td>Feedback/Monitoring for teacher</td>
<td>Whole group instruction</td>
<td>Presenting</td>
<td>Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Game/puzzle</td>
<td></td>
<td>Estimating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstration</td>
<td></td>
<td>Interpreting data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visual display (e.g., PowerPoint)</td>
<td></td>
<td>Counting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Role Play</td>
<td></td>
<td>Basic Number Facts</td>
<td></td>
</tr>
</tbody>
</table>
4. Running account of what’s happening

<table>
<thead>
<tr>
<th>Time</th>
<th>What is the teacher doing?</th>
<th>What is the student/s doing?</th>
<th>Notes/Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Questioning with a specific focus on LLN/Balancing support with challenge (Tick if observed ✓)

Purpose
- assessing prior knowledge
- activating prior knowledge
- helping students structure or make links between or within subjects
- probing for understanding

Level
- simple recall: what, who, where, when?
- challenging: why, how, what if, what makes you think?

Open versus Closed

Questions to elicit opinions/feelings/ideas/experiences

Leaving gaps for students to respond

Using questions to involve all learners in a class

Responding to learners answers as potential teaching moments

Summative/Review/Checking questions (e.g., So what have we learned today?)
APPENDIX F
Sample Ethics Recruit & Consent Form

Investigating LLN & Inclusive Learning and Teaching for TAFE’s Diploma of Nursing (Enrolled/Division 2 Nursing)
QUT Ethics Approval Number 1400000429

RESEARCH TEAM

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Ryan, Associate Professor</td>
<td>Principal Researcher</td>
<td>07 3138 3601 <a href="mailto:me.ryan@qut.edu.au">me.ryan@qut.edu.au</a></td>
</tr>
<tr>
<td>Kerry Mallan, Professor of CYRC</td>
<td>Principal Researcher &amp; Director</td>
<td>07 3138 3463 <a href="mailto:k.mallan@qut.edu.au">k.mallan@qut.edu.au</a></td>
</tr>
<tr>
<td>Karleen Gwinner, Dr</td>
<td>Research Project Manager</td>
<td>07 3138 89627 <a href="mailto:k.gwinner@qut.edu.au">k.gwinner@qut.edu.au</a></td>
</tr>
<tr>
<td>Donna Pennell</td>
<td>Senior Research Assistant</td>
<td>07 3138 86966 <a href="mailto:donna.pennell@qut.edu.au">donna.pennell@qut.edu.au</a></td>
</tr>
<tr>
<td>Cheryl Livock, Dr</td>
<td>Special Projects – LLN/Inclusive Practices &amp; Retention – Advisor and liaison to research team</td>
<td>07 3826 3943 <a href="mailto:Cheryl.Livock@tafe.qld.edu.au">Cheryl.Livock@tafe.qld.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TAFE Queensland</td>
</tr>
</tbody>
</table>

DESCRIPTION
QUT is conducting research into student retention in TAFE’s Diploma of Nursing (Enrolled/Division 2) course and how language, literacy and numeracy (LLN) issues may be affecting unit success, course completion, and employment in the health sector following training. The research is funded and supported by TAFE Queensland and we will be providing TAFE with a final written report.

As part of this research project, we are conducting classroom observations in some units of the course. The classroom observations will help the research team see the kinds of demands teachers and students face in typical classroom lessons of the Diploma of Nursing course. The purpose of the observation is to identify LLN teaching and learning strengths or barriers to the successful completion of the Diploma of Nursing course.

PARTICIPATION
Your class teacher has agreed to be observed as part of this research project. Because you are a member of his/her class, we are inviting you to participate in the observation also. Your participation will involve being observed as a member of the class. The teaching and learning activities of your classroom will be observed for one hour and will take place in your normal classroom during part of a regular lesson in one of your Diploma of Nursing units. A researcher from the project will sit in on your class and take notes on the content of the lesson, how it is delivered, the teaching strategies used to convey the class content and your engagement with it.

Your participation is completely voluntary. If you do not wish to participate, an alternative class will be found for you to attend so that you are not inconvenienced. If you do agree to participate you can withdraw from the project without comment or penalty at any time. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or TAFE (e.g., your grades, relationships with teachers, TQB administration).

EXPECTED BENEFITS
It is expected that this project may not benefit you directly. Participation in the observation may benefit others who enrol in the Diploma of Nursing course in the future, as well as other Vocational Education and Training (VET) courses, such as those offered by TAFE. Your participation may help TQB to improve their teaching and learning environments and assist students of the future to achieve better results. The key purpose of the observation is to assess current practice and so that TQB can increase the likelihood of more students successfully completing the course and achieving employment in the area of their training.

RISKS
The risk associated with your participation in this project is minimal but could include the uncomfortable feeling of being observed by a member of the research team. This risk will be minimised and managed by providing as much information as possible to you about the observation without eliciting unnatural or contrived performances, and being given the opportunity to ask questions prior to agreeing to the observation. In addition, the class observer will be as unobtrusive as possible so that there is minimal distraction to teachers or students.

QUT provides for limited free psychology, family therapy or counselling services for research participants of QUT projects who may experience discomfort or distress as a result of their participation in the research. Should you wish to access this service please contact the Clinic Receptionist of the QUT Psychology and Counselling Clinic on 07 3138 0999. Please indicate to the receptionist that you are a research participant.
PRIVACY AND CONFIDENTIALITY

All comments, responses, and activities observed during the class observation will be treated confidentially by the researchers unless required by law. The names of individual teachers or class members will not appear in any of the research results, reports or publications. Findings drawn from observations will only be presented in summary form. No one other than the research observer (or members of the class during the observation) will be able to trace you to anything specific that may occur at the time of the observation. Observational data will be recorded in a de-identified format using code. The de-identified data of the observation will be held digitally for five years in QUT password protected computer files and in hardcopy in lockable storage cabinets. After five years they will then be destroyed.

The project is funded by TAFE however they will only have access to the data obtained during the project in summary form via a report provided at the end of the project. They will not be able to trace you personally to any specific teaching or learning behavior noted during the classroom observation.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects.

CONSENT TO PARTICIPATE

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to be observed. You will need to give this signed consent form to your class teacher to be put in a research-supplied envelope for collection by the research team.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If have any questions or require further information please contact one of the research team members below.

Assoc/Prof Mary Ryan  Dr Karleen Gwinner  Mrs Donna Pennell
Principal Investigator  Research Project Manager  Onsite Data Collection
07 3138 3569  07 3138 9627  07 3138 8696 (messages only)
me.ryan@qut.edu.au  k.gwinner@qut.edu.au  donna.pennell@qut.edu.au

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Thank you for helping with this research project. Please keep this sheet for your information.*
However, these risks will be minimised and managed with empathy, kindness and responsive engagement with you from research team members who have all worked with adult learners before and been students themselves. In addition, flexible and comfortable arrangements will be sought in arranging the time and location of the interview so that there is minimal inconvenience to you.

QUT provides for limited free psychology, family therapy or counselling services for research participants of QUT projects who may experience discomfort or distress as a result of their participation in the research. Should you wish to access this service please contact the Clinic Receptionist of the QUT Psychology and Counselling Clinic on 07 3138 0999. Please indicate to the receptionist that you are a research participant.

Counselling services are also available at TQB for student support and can be contacted by telephoning 07 3826 3703, or appointments can be made in person at the student services reception counter or customer service centre offices.

**PRIVACY AND CONFIDENTIALITY**

All comments and responses will be treated confidentially by the researchers unless required by law. The names of individual persons will not appear in any of the research transcripts or reported in results, reports or publications. Any identifying information that may be inadvertently recorded during the course of the interview will be removed at the time of transcription. No one other than the research interviewer will be able to trace you to your comments. At the end of the project, the audio recording will be deleted. The de-identified data transcript of the recording will be held digitally for five years in QUT password protected computer files and in hardcopy in lockable storage cabinets at QUT. After five years they will then be destroyed.

The project is funded by TQB however they will only have access to the interview data obtained during the project in summary form via a report provided at the end of the project. They will not be able to trace you to individual comments made during the interview.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

**CONSENT TO PARTICIPATE**

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to be observed. You will need to scan and email this signed consent form to the email address provided on the form. Alternatively, you may phone one of the contacts below to request a stamped addressed envelope to be sent to you. Or you may phone to agree to the interview, and hand your consent form directly to the research person at the time of your interview.

**QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT**

If have any questions or require further information please contact one of the research team members below.

- Assoc/Prof Mary Ryan  
  Principal Investigator  
  07 3138 3569  
  me.ryan@qut.edu.au

- Dr Karleen Gwinner  
  Research Project Manager  
  07 313 89627  
  k.gwinner@qut.edu.au

- Mrs Donna Pennell  
  Onsite Data Collection  
  07 3138 8696 (messages only)  
  donna.pennell@qut.edu.au

**CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT**

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Thank you for helping with this research project. Please keep this sheet for your information.*
Investigating LLN & Inclusive Learning and Teaching for TAFE’s Diploma of Nursing (Enrolled/Division 2 Nursing)

QUT Ethics Approval Number 1400000429

RESEARCH TEAM

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Ryan, Associate Professor</td>
<td>Principal Researcher</td>
<td>07 3138 3601</td>
<td><a href="mailto:me.ryan@qut.edu.au">me.ryan@qut.edu.au</a></td>
</tr>
<tr>
<td>Kerry Mallan, Professor</td>
<td>Researcher &amp; Director of CYRC</td>
<td>07 3138 3463</td>
<td><a href="mailto:k.mallan@qut.edu.au">k.mallan@qut.edu.au</a></td>
</tr>
<tr>
<td>Karleen Gwinner, Dr</td>
<td>Research Project Manager</td>
<td>07 313 89627</td>
<td><a href="mailto:k.gwinner@qut.edu.au">k.gwinner@qut.edu.au</a></td>
</tr>
<tr>
<td>Donna Pennell</td>
<td>Senior Research Assistant</td>
<td>07 3138 8696</td>
<td><a href="mailto:donna.pennell@qut.edu.au">donna.pennell@qut.edu.au</a></td>
</tr>
<tr>
<td>Cheryl Livock, Dr</td>
<td>Special Projects – LLN/Inclusive Practices &amp; Retention Advisor and Liaison to Research Team</td>
<td>07 3826 3943</td>
<td><a href="mailto:Cheryl.Livock@tafe.qld.edu.au">Cheryl.Livock@tafe.qld.edu.au</a></td>
</tr>
</tbody>
</table>

Faculty of Education
Queensland University of Technology (QUT)

DESCRIPTION

This research project is being undertaken by researchers at the Children and Youth Research Centre (CYRC) at Queensland University of Technology (QUT) and is funded and supported by the TAFE Queensland. The research arises out of a concern for student retention in TAFE’s Diploma of Nursing (Enrolled/Division 2) Course.

The aim of this investigation is to examine the language, literacy and numeracy (LLN) demands of the Diploma of Nursing (Enrolled/Division 2 Nursing) course and the issues faced by teachers and students as a result. This investigation is particularly focused on how LLN factors may impact classroom teaching, the ability of students to achieve course success and completion, and how this, in turn, affects the successful employment of students in the health sector following training. The purpose of the research is to inform and improve inclusive teaching practices and learning outcomes for students at TAFE.

A key goal of the research will be to find ways that TAFE can address the language, literacy and numeracy (LLN) issues faced by students and teachers of the Diploma of Nursing course, and to increase student retention rates in this course.

You are invited to participate in this project because you are completing student of the course, or you are a student who withdrew from the course prior to completion.

PARTICIPATION

Your participation will involve an audio-recorded interview at your TAFE campus or other mutually convenient and agreed location that will take around 30 minutes of your time. Questions will include “What are/were the challenges you face/d in meeting the requirements of your course?” and “How could you be (have been) better supported to achieve your goals?”

Your participation in this project is entirely voluntary. If you do agree to participate you can withdraw from the project without comment or penalty. Your decision to participate or not participate will in no way impact upon your current or future relationship with QUT or with TQB (e.g., future enrolment, existing relationships or grades).

EXPECTED BENEFITS

It is expected that this project may not benefit you directly, although you may appreciate the opportunity to discuss your experience and perspective as a student of the Diploma of Nursing course. Participation in the student interview may benefit others who enrol in the Diploma of Nursing course in the future, as well as other Vocational Education and Training (VET) courses, such as those offered by TAFE. Your participation may assist TAFE and other VET institutions to provide improved inclusive teaching practices to support literacy, numeracy and the language learning needs of students, providing better and more successful outcomes for students’ long term. Your participation in this student interview may increase the likelihood of more students successfully completing the course and achieving employment in the area of their training.

RISKS

There are minimal risks associated with your participation in this interview. These include providing time you might otherwise devote to study or other personal activities, feeling a little nervous in speaking to a stranger (i.e., the member of the research team) or in a language which is not your first, and feeling troubled when talking of personal issues that you have faced whilst undertaking your course.
However, these risks will be minimised and managed with empathy, kindness and responsive engagement with you from research team members who have all worked with adult learners before and been students themselves. In addition, flexible and comfortable arrangements will be sought in arranging the time and location of the interview so that there is minimal inconvenience to you.

QUT provides for limited free psychology, family therapy or counselling services for research participants of QUT projects who may experience discomfort or distress as a result of their participation in the research. Should you wish to access this service please contact the Clinic Receptionist of the QUT Psychology and Counselling Clinic on 07 3138 0999. Please indicate to the receptionist that you are a research participant.

Counselling services are also available at TAFE for student support and can be contacted by telephoning 07 3826 3703, or appointments can be made in person at the student services reception counter or customer service centre offices.

**PRIVACY AND CONFIDENTIALITY**

All comments and responses will be treated confidentially by the researchers unless required by law. The names of individual persons will not appear in any of the research transcripts or reported in results, reports or publications. Any identifying information that may be inadvertently recorded during the course of the interview will be removed at the time of transcription. No one other than the research interviewer will be able to trace you to your comments. At the end of the project, the audio recording will be deleted. The de-identified data transcript of the recording will be held digitally for five years in QUT password protected computer files and in hardcopy in lockable storage cabinets at QUT. After five years they will then be destroyed.

The project is funded by TAFE however they will only have access to the interview data obtained during the project in summary form via a report provided at the end of the project. They will not be able to trace you to individual comments made during the interview.

Please note that non-identifiable data collected in this project may be used as comparative data in future projects or stored on an open access database for secondary analysis.

**CONSENT TO PARTICIPATE**

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to be observed. You will need to scan and email this signed consent form to the email address provided on the form. Alternatively, you may phone one of the contacts below to request a stamped addressed envelope to be sent to you. Or you may phone to agree to the interview, and hand your consent form directly to the research person at the time of your interview.

**QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT**

If you have any questions or require further information please contact one of the research team members below.

<table>
<thead>
<tr>
<th>Assoc/Prof Mary Ryan</th>
<th>Dr Karleen Gwinner</th>
<th>Mrs Donna Pennell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Research Project Manager</td>
<td>Onsite Data Collection</td>
</tr>
<tr>
<td>07 3138 3569</td>
<td>07 313 89627</td>
<td>07 3138 8696 (messages only)</td>
</tr>
<tr>
<td><a href="mailto:me.ryan@qut.edu.au">me.ryan@qut.edu.au</a></td>
<td><a href="mailto:k.gwinner@qut.edu.au">k.gwinner@qut.edu.au</a></td>
<td><a href="mailto:donna.pennell@qut.edu.au">donna.pennell@qut.edu.au</a></td>
</tr>
</tbody>
</table>

**CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT**

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Thank you for helping with this research project. Please keep this sheet for your information.*
APPENDIX G
Sample HLTEN506B Weekly Activity Booklet

Week 2
Wound Care Glossary

Intrinsic

Extrinsic

Anaemia

Peripheral circulation

Malignancy

Fungating

Paraplegia

Auto-immune disorder

Neuropathy

Haemorrhage

Haematoma

Dehiscence

Evisceration

Keloid

Give an example of each of the following types of drugs:

Corticosteroid

Non-steroidal anti inflammatory

Chemotherapy
Anticoagulation and Antiplatelet Therapy
HLTEN507C

Revision of Week 4

Across

1. Disorders of haemostasis are typically divided into thromboembolic and ______ disorders
7. A significant risk factor for patients receiving Warfarin is ______
8. Patients receiving low molecular weight Heparin (LMWH) require injections per day than patients receiving unfractionated Heparin
9. A DVT is commonly found in the ______ veins of the legs
10. Warfarin is commonly used for thrombosis prophylaxis for patients with ______ heart valves
13. An injectable anticoagulant is ______
18. Low molecular weight Heparin (LMWH) is more absorbed by the body ______
20. The antagonist for Heparin is ______ sulphate
25. Coagulation is the ______ stage of haemostasis
26. The antidote for Warfarin is ______ (2 words)
27. A common site for an embolus to become lodged is the ______
28. An adverse effect of Heparin is ______
29. Platelet plug formation is the ______ stage of haemostasis

Down

2. Heparin dosages are not recorded in milligrams but in ______ units
3. Patients receiving Warfarin must have their ______ monitored regularly
4. An embolus can be comprised of ______, blood, air or amniotic fluid
5. Heparin can be used for DVT ______
6. Although Marevan and Coumadin are the same generic drug they cannot be ______
11. A blood clot that has become dislodged from the vessel wall and is moving around the circulation is called a thrombo- ______
12. The most common oral anticoagulant is ______
14. Antiplatelet drugs inhibit ______ plug formation
15. A potential adverse effect of aspirin is gastric ______
16. Antiplatelet drugs must be ______ days prior to surgical procedures
17. The most common oral antiplatelet drug is ______
19. The clinical term for a blood clot is ______
21. Patients receiving Heparin must have their ______ monitored regularly
22. Low molecular weight Heparin (LMWH) has a ______ half life than unfractionated Heparin
23. Vascular ______ is the first stage of haemostasis
24. Warfarin interferes with ______ K usage in the body
## Study Plan

### Workload Pace

This unit has a suggested study timeline (see below). This timeline is a guide only and is intended to assist students in gaining maximum benefit from this unit and to ensure completion.

### Session Timetable

Students will need to complete the content and undertake all assessment to be deemed competent. Students are advised to do extra work on the unit and also complete any consolidation exercises to ensure they fully understand the content prior to assessment. Students who require additional time to complete assessment tasks are encouraged to speak to their teacher. Students who are deemed not competent are encouraged to re-enrol in this unit/module. The following is a proposed timetable only.

<table>
<thead>
<tr>
<th>Week/Session</th>
<th>Educational Content to be covered</th>
</tr>
</thead>
</table>
| Week/Session 1 | Introduction to competency and assessment items  
What is Chronic Illness?  
Differences between Chronically Ill and Acutely Ill patients  
Pathophysiologic mechanisms of disease  
Introduction to Cancer  
The multidisciplinary approach  
Discharge Planning  
Rehabilitation |
| Week/Session 2 | Respiratory disorders  
Administration of oxygen therapy  
Lung Function tests  
Use of Inhalant therapy |
| Week/Session 3 | Cardiovascular disorders  
Anti embolism stockings  
Emergency response |
| Week/Session 4 | Integumentary disorders |
| Week/Session 5 | Endocrine and Metabolic disorders  
Monitoring BSLs |
| Week/Session 6 | Neurological disorders  
Assessing level of consciousness  
Chronic Pain Management |
| Week/Session 7 | Gastrointestinal disorders  
Stomal Therapy  
Enteral feeding  
**CASE STUDY DUE FRIDAY 1600** |