

7 March 2011

**Commissioner Mike Woods
Deputy Chair Productivity Commission
Chair Education and Training Workforce: Vocational Education and Training**

Dear Commissioner Woods

Please find attached a Submission to the Productivity Commission from the Australian Council of Deans of Education based on the draft research report on the Vocational Education and Training Workforce

The Australian Council of Deans of Education (ACDE) is the peak association of the deans of faculties and heads of schools of education in Australian universities and other higher education institutions. The Council informs national issues in education, promotes the funding, recognition and conduct of research, and partners with national stakeholders with interests in education to influence policy and practice in education.

15 universities provide teacher-training qualifications for vocational education and training (VET) practitioners. This submission has been prepared by the ACDE/ VET Working Party formed specifically to respond to the Productivity Commission Inquiry. Membership of the Committee is at Appendix 1.

ACDE strongly supports the Productivity Commission's portrayal of the environment for the future VET workforce as complex and demanding. The Council asserts that the Higher Education Sector is pivotal to building the current capacity of the VET workforce to engage with these demands.

There is significant scope for pathways to be strengthened so that VET professionals will aspire to, be supported in and engage with tertiary training and education. Highly trained VET teachers will make a significant difference to student learning outcomes that is not possible with competency-based qualifications (valuable as they may be in the development of specific skills need for the VET workforce)

The Productivity Commission report and COAG targets highlight the significant pressure to skill up the Australian Workforce to meet a range of new challenges – including for example the Green economy, the mining resource boom and more recently rebuilding efforts associated with natural disasters. A highly qualified VET workforce will provide momentum and leadership to these challenges. With these challenges in mind the Australian Council of Deans of Education makes the following recommendations for inclusion in the Commission's final report.

1. VET practitioners should be encouraged to undertake VET teaching/training qualifications above the Certificate IV level. Career progression for full-time VET teachers and trainers, and part-time staff where appropriate, should be related to the progressive acquisition of higher-level VET teaching/training qualifications. Relevant industrial agreements should reflect this progression.

2. Formal arrangements should be established between IBSA and the relevant universities for a pathway from the Certificate IV through the Diploma in Training and Assessment¹ to a university VET teaching/training qualification.
3. Universities should collaborate to achieve more consistency in content among their VET teacher-training courses.
4. The delivery of the Certificate IV in TAA should be undertaken by a teacher/trainer holding a Diploma in Training and Assessment or a university VET teaching/training qualification.
5. A Diploma in Training and Assessment or a university VET teaching/training qualification should be the minimum qualification for those supervising staff without the Certificate IV TAA.
6. A proportion (we suggest 25%) of RTO staff should hold a university qualification in VET teaching/training and this should be considered during AQTF audits (Standard 1). These staff will provide informed leadership to other teachers/trainers and will form the foundation for senior capability within the RTO and beyond.
7. Further targeted research should be carried out into VET teachers and their qualifications. This should include the contribution of VET practitioners' teaching/training qualifications to teaching practice, quality and student satisfaction, and the impact of the nature of the workforce on career progression and take-up of higher teaching qualifications.

Please do not hesitate to contact me through Helen Kenneally, ACDE's Executive Officer if you wish to discuss any aspect of this submission.

Yours sincerely



Professor Toni Downes: President
Australian Council of Deans of Education Inc

¹ Reference to the Diploma of Training and Assessment here and elsewhere is to the new qualification to be endorsed 2011. The previous qualification is not suitable for this purpose as it is not focused on teaching and training. The current Victorian Diploma of VET Practice is equivalent to the new Diploma TAA in its focus, and should be considered as included in our recommendations.

ACDE SUBMISSION TO PRODUCTIVITY COMMISSION INQUIRY TO EDUCATION AND TRAINING WORKFORCE: VOCATIONAL EDUCATION AND TRAINING

The ACDE submission has six sections:

1. University VET teaching qualifications and pathways from Certificate IV TAA.
2. Evidence about the benefits for practitioners of undertaking a university VET teaching qualification compared with a Certificate IV in Training and Assessment.
3. The changing VET environment and the contribution of university VET teaching/training qualifications.
4. Evidence about the different characteristics of degree-qualified people compared with Certificate and Diploma qualified people.
5. Potential barriers to VET practitioners accessing university VET teaching qualifications.
6. Comments on specific points in the draft report

These sections provide data which have informed the development of the recommendations.

1. UNIVERSITY VET TEACHING QUALIFICATIONS AND PATHWAYS FROM CERTIFICATE IV TAA

The Productivity Commission has rightly highlighted the complexity of the VET sector and the varied roles that teachers and trainers take within it. While industry qualifications (which may be at Certificate, Diploma or degree level) are essential for teaching in VET, qualifications in teaching/training are fundamental to building VET workforce knowledge and capacity.

Guthrie (2010) traces the development of VET teacher-training from the time when university qualifications were undertaken by all full-time TAFE teachers to the current situation when the Certificate IV qualification, first introduced in 1998, gradually became the standard qualification, in what he terms a 'minimalist, regulatory approach'.

Each State and Territory made decisions about the required qualifications for its TAFE workforce, with NSW being the last to abandon mandatory university VET teaching/training qualifications for full-time teachers, in 2007. However, some States and Territories do offer progression on salary scales for possession of higher-level teaching/training qualifications, and notably Tasmania has just moved back to requiring degree-level qualifications. Private RTOs have individual recruitment requirements but there does not seem to be any evidence that any require university teaching/training qualifications, although some private RTO staff are qualified to this level.

As previously advised 15 universities now currently offer VET teaching/training qualifications, and the number of students is estimated at around 2000. University VET teaching/training qualifications all engage with the Certificate IV TAA, recognising that this is the regulatory minimum although acknowledging the variable quality of its delivery (Smith & Bush, 2006). This happens, however, in different ways, some requiring it as prerequisite for entry which gains credit, others embedding it within their programs, providing 'reverse credit' (Brennan Kemmis & Smith, 2004). Some programs also involve pathways from the Diploma qualification.

Guthrie (2010) suggests that ‘more active collaboration between universities and the VET sector will yield better teacher training and professional development.’ This view is supported by Innovation and Business Skills Australia (the Industry Skills Council responsible for the Certificate IV and Diploma qualifications), which is currently sponsoring a project on collaboration with universities delivering VET teaching/training qualifications.

2. BENEFITS FOR PRACTITIONERS OF UNDERTAKING A UNIVERSITY VET TEACHING/TRAINING QUALIFICATION

A university qualification in VET teaching/training provides the following benefits for VET teachers and trainers:

- Underpinning knowledge for their practice; skills to critique, interrogate and update practice; advanced teaching skills, sometimes supported by periods of supervised teaching/training practice.
- Evidence-based learning, based on research;
- A chance to mix with experts and other teachers/trainers;
- General educational development to function at an appropriate level when interacting with industry and other parties;
- A foundation for career pathways within VET, in industry and within the new tertiary sector; and
- Pathways to higher-level qualifications, e.g. masters and research degrees.

All education sectors (school-teaching, Early Childhood) require and/or encourage degree qualifications for their teachers. Universities are increasingly doing so; TEQSA is expected to include the proportion of academics with a teaching qualification as a standard to be measured. Other countries require degree qualifications for full-time VET teachers (for example the UK (with its VET Qualified Teacher Learning and Skills status) and Germany (which requires a Masters). A short explanation of the German system, from a German VET teacher-educator, Professor Thomas Deissinger, is attached at Appendix 2.

It should also be remembered that the Australian government is currently aiming at 40% of the population to have degrees; as those responsible for educating others, VET teachers/trainers should certainly be consistent with this proportion.

It may be argued that professional development activities may be as effective as qualifications in raising levels of skill and knowledge. However qualifications have many advantages, for example:

- They are conferred by recognised institutions and are scrutinised through managerial and collegial processes as well as being audited by outside bodies;
- They provide assessment of learners so that learning outcomes are verified;
- They are developed in consultation with industry and other appropriate stakeholders and represent consensus on what practitioners need to learn;
- They provide coherent and integrated rather than ad-hoc learning;
- The learning is transferable across contexts.

As the currency of the VET sector itself is qualifications, it would reasonably be expected that its practitioners should value qualifications.

Four ACDE member universities have provided comments from their VET teaching/training students, which indicate in students’ own words what ‘added value’ they gained from undertaking a university VET teaching/training qualification. Comments were obtained in most cases through routine evaluations. They are gathered here under three major headings. Salient points from each comment have been highlighted.

A university qualification offers depth of understanding

- 'The university qualification makes me more analytical, of issues, and also gives me a **deeper understanding** of teaching issues. We need this in teachers who work at Diploma levels and above.' (Male, 2011)
- 'I am better able to **critically reflect on my teaching practices** and the worlds I inhabit.' (Female, 2011)
- 'My journey so far has provided a deeper appreciation of the reasoning **behind why, how and what an educator's role is**. This is certainly not something the Cert IV offers.' (Male, 2011)
- 'From my perspective I see my university qualification giving me a **broader knowledge base to work with** instead of the more specifically vocationally based aspect of the Cert IV.' (Female, 2011)

A university qualification transforms my practice

- 'Although Cert IV gives you the access to train/facilitate, it is merely a piece of paper that provides little, if any, foundation required to assist students in their learning. A degree, however, provides **valuable information that can be passed down to students** with extensive training to cement the materials learnt and the confidence required to successfully facilitate.' (Male, 2011)
- 'The university qualification encompasses a variety of instructors, who all make you critically think about; not just what you are doing, but why you are doing it and all the possible implications for the learner (and broader society) based on your approach... This has **transformed my teaching** through the critique of my work from a broader perspective than before. I certainly wasn't inspired to do this following my completion of Cert IV.' (Female, 2011)
- 'Undertaking units from [the degree] has given me the opportunity to self-evaluate my teaching style and adopt new methods to facilitate learning. This has improved my communication skills, classroom management and facilitation techniques, making learning more enjoyable and productive for participants... **I would highly recommend that every VET teacher consider extending their knowledge** beyond what is the basic requirement of the Certificate IV in TAA.' (Female, 2010)
- 'Since studying here, I am able to **communicate with students more**.' (Student, 2008)

A university qualification allows us to engage with complex work roles and initiate improvement

- 'If a tradesperson wishes to design learning and work full time in the VET sector, then the benchmarks are much higher. A university qualification validates my observations and reflections over years of working in the VET sector, providing credibility when operating at senior management and government level. It also equips me to **design, critique and benchmark learner resources and learning strategy design at a level significantly greater than one who has only completed a Cert IV**. Researching skills, reporting research results and academic writing is another significant benefit of the higher qual.' (Student, 2011)
- 'On a professional level, Cert IVs produce workplace and industrial 'drones' that often perpetuate and promote the lack of critical thinking in others - they ask us not to examine, discuss, analyse or question. In a workplace they may be devoid of problem solving skills, narrow and task minded, lack initiative or at a loss in new and complex situations. University trained educators are exposed to far more scenarios through their study and examination of current theories, peer and group discussions and by scrutinising their (and others) workplaces which enables a broader understanding of different approaches in various work and educational contexts. It also allows the educator to develop a strategy that is **inclusive of the diversity** within cultures and society rather than the dogma of Cert IV training and competencies.' (Female, 2011)
- 'I am now more confident in myself and my ability to implement continuous improvement in not only the way that I teach but also to ensure that the material that I am delivering is relevant and reflects the current best practices available. I hold both the current TAA Cert IV qualification and the BSZ Cert IV and **neither of them truly taught me how to teach, the only thing that they provided me with was the ability to assess competencies**.' (Male, 2011)

While training providers remain relatively silent about the effects of an underqualified workforce, perhaps not wishing to draw attention to inadequacies in their staff, **industry employers who engage with the VET sector are more forthright.** Conversations with employers indicate a high level of awareness of the low level and poor delivery of the Certificate IV qualifications.

- Smith, Brennan Kemmis, Grace & Payne (2009) in a study of VET workforce development in the services industries, found several employers in these industries who were not happy with the quality of teaching provided by Cert IV-qualified staff. For example, a focus group of Hair and Beauty industry managers (salon owners) described the qualification thus: ‘a load of rubbish’; ‘it’s underdone – it’s delivered in a weekend’; ‘the content is thin’.
- The following comment has been provided to us by a former employer in the children’s services sector: ‘I could not recruit staff with a deep understanding of the importance of play based curriculum. A significant factor was the level of their training – often by people who had a Certificate IV in Training and Assessment, and if we were lucky a Diploma in Children’s Services.’

3. THE CHANGING VET ENVIRONMENT AND THE CONTRIBUTION OF UNIVERSITY VET TEACHING/TRAINING QUALIFICATIONS

The Productivity Commission’s draft research report (p 6.1) lists a number of demands upon the future VET workforce. These are listed below with a brief explanation of how these demands are addressed in university VET teaching/training qualifications.

Demand	Contribution of university VET teaching/training qualifications
a. Deliver a higher volume of training	The University sector has the capacity to supply large numbers of highly qualified VET practitioners into the VET workforce, particularly in the new demand-driven HE environment. As many university programs embed the Certificate IV we also add to the number of people at entry-level in VET.
b. Respond to unpredictable fluctuations in demand for training in a climate of policy change, economic volatility and shifting international ties	All degree courses in VET teaching qualifications include a study of the policy context as applied to VET. Through subjects or inter-related subjects about VET policies and the policy process, student teachers gain not only a sophisticated understanding of those factors that influence and drive policies, but develop the skills and knowledge to actively engage with policy – not only in their implementation, but in their analysis and development.
c. Deliver more training at higher levels of qualification	University-trained VET teachers/trainers understand what it means to develop depth of knowledge, to study a discipline as a coherent body of knowledge rather than as a collection of competencies, to engage in analysis, evaluation and critique of knowledge
d. Deliver more training in foundation-level language, literacy and numeracy skills	University VET teacher qualification courses address the needs of vocational teachers and trainers in this regard in a range of different ways, with subjects developed by academics with specialist expertise in LLN pedagogies, and who are actively engaged in research and scholarship in LLN education and VET

	both nationally and internationally
e. Handle a more diverse student population, including ‘second-chance’ learners, students from low socio-economic-status backgrounds, students from non-English speaking backgrounds, Indigenous students, students with disability, and students in remote areas	VET teacher education courses address issues of student diversity and difference, and inclusive pedagogies through specialised subjects developed by experts in VET sociology
f. Engage in more flexible modes of delivery, including e-learning, online delivery and distance education	University VET teacher education courses provide the skills and knowledge to design and implement programs in flexible modes but also by helping the student teachers develop a capacity for a critical approach to some of the flexible approaches
g. Develop stronger ties to industry and engage in more employment-based delivery	University VET teacher education courses require their students to hold the relevant vocational qualifications and have a minimum of five years industry experience in their vocational area, and many subjects require students to undertake extensive assignments within industry. Academics research within industry.
h. Adapt to overlapping boundaries with schools and higher education	This is an important area that university based VET teacher education courses can address more effectively than any other sector. All of the universities currently offering VET teacher education programs are also involved in secondary teacher education. All universities also have programs in higher education teaching and learning, usually as a Graduate Certificate course. Many currently offer, or are working towards, overlap among these programs.
i. Undertake a greater volume of recognition of prior learning and recognition of current competency.	All VET teacher education courses include at least one subject on assessment that develops student teachers’ knowledge of a range of theoretical and philosophical approaches to assessment and their practical implications. These subjects include the assessment of VET learners through RPL and recognition of current competency.

Thus universities currently deliver programs educating VET practitioners with the capabilities that the Productivity Commission has identified as future VET workforce needs. The graduates from these university programs add to the overall capacity of the VET workforce to deliver a higher volume of qualifications to a more diverse student body.

The VET sector will continue to be influenced and challenged by social, economic and political changes. This means that *in addition to* the capabilities identified by the Productivity Commission, there must be a critical mass of VET professionals who are able to adapt to *future* changes and have the capacity to research. Research capability builds the foundation and pathway for some of the graduates of these courses to undertake Masters level courses to pursue higher level studies of VET and adult education, and some to undertake research degrees to produce original research in VET.

VET academics in universities, because they are not working directly within the VET sector, can identify aspects of VET practice that practitioners embedded in the everyday practices within the sector take for granted and do not question. The practitioners enrolled in the universities' courses, on the other hand, are familiar with their sector and bring professional insights and understanding of current concerns. Through constructive dialogue, new knowledge and policies can emerge. Universities provide an environment where VET teachers can discuss the challenges they are facing in their workplaces with fellow professionals and their academic lecturers. During their course, university academics conduct supervision visits in the teachers' workplaces to observe and give feedback on their teaching practice or have close relationships with local practitioners who share in this task.

Currently there is still a critical mass of universities offering degrees in VET teacher education, and a critical mass of academics within these institutions that specialise in VET and adult education. However, many of these academics will be retiring over the next 10 to 15 years, and there is a need for serious attention to the renewal of this workforce if Australian VET is to continue to be informed by national and international research. Thus the Bachelor or Graduate Diploma qualification must also be understood as an important pathway for future academics and researchers of VET.

4. EVIDENCE ABOUT THE DIFFERENT CHARACTERISTICS OF DEGREE-QUALIFIED PEOPLE COMPARED WITH CERTIFICATE AND DIPLOMA QUALIFIED PEOPLE

This section examines evidence on this matter from a range of sources.

Evidence from another industry

Pidd, Roche & Carne (2010) investigated the role of VET in workforce development of Alcohol and Other Drugs workers in their sector. Like the VET industry, there is a Certificate IV qualification and also university qualifications. The researchers surveyed 186 managers of Alcohol and Others Drugs services on their workforce development needs. Part of the survey asked the managers about their recruiting preferences with regard to qualifications. Pidd *et al* (2010, p. 17) state that,

The majority of managers preferred specialist workers to have either higher education qualifications with explicit alcohol and other drugs content, or relevant higher education qualifications with additional accredited alcohol and other drugs training. Alcohol and other drugs qualifications obtained from the VET sector were the least preferred option of the majority of managers.

Reasons for these preferences included the belief that university trained recruits had the ability to 'work with all types of clients with all sorts of issues and not just an alcohol and other drugs symptom' and that they were better able to employ evidence-based assessment and intervention. In contrast, VET-only qualified practitioners were believed to lack the theoretical framework for dealing with clients with complex needs, and managers complained that these recruits required more on-the-job training than their university-trained colleagues. Managers also cited variability of quality of VET training as a reason for their recruitment preferences. It should be noted that most managers preferred to hire university-trained practitioners who also possessed a VET qualification in the specialist area (Pidd *et al* 2010, pp. 17-18).

The findings from this study lend support to the argument that VET-based qualifications such as the Certificate IV in Training and Assessment do not constitute a sufficient basis for VET education and training practice. Like practitioners in the Alcohol and Other Drugs sector, VET educators and trainers need to draw on a comprehensive theoretical framework to deal effectively with the complex demands of VET training and assessment. Anecdotal evidence suggests that practitioners with VET-sector qualifications only can require remedial on-the-job training before they are competent to undertake essential teaching and assessment tasks.

Evidence from analysis of the difference between learning outcomes from the Certificate IV in TAA and conceptualisations of teachers' knowledge and expertise

Robertson (2008) draws on the work of researchers and theorists who have attempted to identify the knowledge bases of teachers. Through an analysis of endorsed curriculum materials designed to develop the core units of competency of the Certificate IV in Training and Assessment, Robertson (2008) demonstrates a number of shortcomings in relation to Turner-Bisset's 12 teachers' knowledge bases. Robertson asserts that both subject knowledge bases (1 & 2) should be well covered due to the industry experience requirements for all VET practitioners. He finds that curriculum knowledge, knowledge of educational contexts and knowledge of educational ends purposes and values (4, 10 & 11) are addressed, although the relevant units call for only superficial and/or uncritical knowledge of these bases. Likewise, general pedagogical knowledge and knowledge of learners (5 & 6) are addressed but in a cursory manner. For example, Robertson (2008, p. 15) concludes that graduates from the Certificate IV in TAA

develop knowledge of learners that is largely limited to superficial, descriptive and applied concerns. There is no evidence of the development of critique or conceptual understandings. For example, in respect to accommodating a diversity of language, literacy and numeracy needs, low level practical suggestions are provided but no underpinning conceptual foundations.

He also judges that beliefs about subjects, knowledge of teaching and knowledge of self bases (3, 6 & 9) are not explicitly addressed in minimum requirements of delivery or assessment. This shortcoming is broadly entailed by the lack of critical reflection on practice that characterises the Certificate IV in TAA. Finally, pedagogical content knowledge, which draws on both subject area knowledge and teaching skills, is only developed to a novice level. Robertson's (2008, p. 18) analysis leads him to conclude that,

if the VET sector is to meet the diverse requirements of learners in a diverse range of contexts which are characterised by frequent requirements to work autonomously and to address non-routine issues, then the CIV TAA is not suitable for the task.

This analysis points to significant shortcomings in the Certificate IV in TAA as a sufficient qualification for VET educators and trainers. In contrast, most higher-education sector programs explicitly develop broad theoretical frameworks related to learners and pedagogy, and also develop reflective and critical capabilities that underpin beliefs about subjects, knowledge of teaching and knowledge of self bases (3, 6 & 9).

Evidence from research into the knowledge and beliefs of graduates from Certificate IV level qualifications

Simons, Harris and Smith (2006) interviewed trainers and graduates to determine the understanding of learning and learners promoted by the pre-2004 Certificate IV in Assessment and Workplace Training. Interviews with 27 graduates revealed limited understandings of learning and learners. Some graduates articulated their understanding of learner diversity in terms of stereotypes, and there were few references to learner characteristics that have been subject to considerable research in relation to their impact on learning (e.g. gender, ethnicity and race) (Simons, Harris & Smith 2006, p. 39). In addition, graduates were not aware of the demands of preparing particular learners for particular industries, and according to the researchers,

some of the understandings about learners and learning appear to rest on knowledge which has been challenged elsewhere or which lacks a sound empirical basis. These understandings serve to limit the potential for VET to deliver the goal of promoting lifelong learning and enabling participation in VET by diverse groups of learners. (Simons et al, 2006, p. 41)

This research supports Robertson's (2008) analysis. In particular, Robertson's assertion that the Certificate IV qualification for VET practitioners does not develop sufficient knowledge of learners (knowledge bases 7 and 8 above) is supported by the Simons *et al* research.

Evidence from analyses of general differences between VET and higher education approaches to knowledge

Any attempt to clarify the value of Australian VET qualifications for VET practitioners, or compare them with higher education qualifications for VET practitioners must reckon with the fact that VET is competency-based, while most higher education is based on 'bodies of knowledge' or 'disciplines' and focuses on the development of complex graduate attributes built on discipline knowledge.

There are significant differences between how each type of curriculum is derived and the learning outcomes to be expected from each. Competency Based Training (CBT) has been subject to a great deal of criticism for focusing on the observable performance aspects of competent work to the detriment of underlying knowledge (e.g. Billet & Hayes 1999, Smith & Keating 2003, and Wheelahan 2004). As a result, according to these criticisms, learners whose understanding of a job role is developed in a competency-based program will not necessarily achieve a grasp of the principles and ways of thinking that underpin competent performance.

The potential for a CBT program to promote a relatively superficial understanding of a work role is exacerbated by the use of modular approaches to instruction and assessment (Cornford 1997). The analysis of competent work in the CBT system yields discrete units of competency which each represent a stand-alone component of a work role. When, as is often the case, these units become the basis of learning program structure, appreciation of whole work roles by learners is threatened. Critics have used terms such as 'atomisation' and 'fragmentation' to highlight the impact of modularisation on the formation of a holistic understanding of competent work (Chappell, Gonczi & Hager 2000).

In contrast with competency-based VET, higher education curriculum and pedagogy are based on the principles and theories that give a body of knowledge coherence. By giving learners access to this kind of knowledge, higher education facilitates development of a holistic understanding of the discipline or industry area and a critical appreciation of how and when to apply theoretical knowledge in particular contexts. Disciplinary knowledge typically addresses its own limitations, giving learners awareness of problems and debates in their areas of expertise as well as a foundation for innovation and self-directed learning (Wheelahan 2007).

These arguments apply in general to differences between VET and higher education qualifications, and apply no less to the respective contributions made by the VET teaching/training qualifications offered by each sector. While a competency-based teaching/training qualification may impart certain skills and a limited amount of knowledge it does not provide what a university-level qualification does. According to Wheelahan (2008) 'Workers need to be able to use theoretical knowledge in different ways and in different contexts as their work grows in complexity and difficulty.'

The analysis of differences between VET curriculum and higher education curriculum helps to account for the conclusions of Pidd, Roche and Carne's (2010) research, Robertson's analysis (2008) and Simons, Harris and Smith's (2006) research. In Pidd, Roche and Carne's (2010) research, Alcohol and Other Drugs Service Managers preferred to recruit workers with a university degree because these workers could apply a broad theoretical framework in situations with clients with complex needs. Robertson (2008) concluded that the Certificate IV in Training and Assessment would not equip graduates to address complex requirements, while Simons, Smith and Harris (2006) found that graduates with the earlier Certificate IV in Assessment and Workplace Training developed relatively unsophisticated understandings of learner diversity.

VET teachers and trainers are delivering competency-based programs. Having themselves been trained only in a competency-based manner they may be unable to grasp either the complexities or the limitations of competency-based training. As Lowrie, Smith & Hill (1999: 75) found, a Certificate IV-trained TAFE teacher ‘typically presents CBT as unproblematic’. Yet there is a substantial body of research evidence to show that CBT requires teachers to be more, rather than less, well trained than pre-CBT curriculum did and requires a much higher level of skill.

Evidence derived from analysis of Australian Qualifications Framework (AQF) levels criteria

The AQF (AQF Council 2011) differentiates 10 levels of qualification. In terms of AQF structure, the argument that a Certificate IV-level qualification should be complemented by a higher education pathway as a basis for effective VET practice appeals to the formal difference between AQF Levels 4 and 7. The criteria that apply to each of these levels is presented in Table 3.

Table 3: AQF outcomes for qualifications at Level 4 (Cert IV) and Level 7 (Bachelors)

Levels	Level 4	Level 7
Summary	Graduates at this level will have theoretical and practical knowledge and skills for specialised and/or skilled work and/or further learning	Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning
Knowledge	Graduates at this level will have broad factual, technical and some theoretical knowledge of a specific area or a broad field of work and learning	Graduates at this level will have broad and coherent theoretical and technical knowledge with depth in one or more disciplines or areas of practice
Skills	Graduates at this level will have a broad range of cognitive, technical and communication skills to select and apply a range of methods, tools, materials and information to: <ul style="list-style-type: none"> • complete routine and non-routine activities • provide and transmit solutions to a variety of predictable and sometimes unpredictable problems 	Graduates at this level will have well developed cognitive, technical and communication skills to select and apply methods and technologies to: <ul style="list-style-type: none"> • analyse and evaluate information to complete a range of activities • analyse, generate and transmit solutions to unpredictable and sometimes complex problems • transmit knowledge, skills and ideas to others
Application of knowledge and skills	Graduates at this level will apply knowledge and skills to demonstrate autonomy, judgement and limited responsibility in known or changing contexts and within established parameters	Graduates at this level will apply knowledge and skills to demonstrate autonomy, well developed judgement and responsibility: <ul style="list-style-type: none"> • in contexts that require self-directed work and learning • within broad parameters to provide specialist advice and functions

(Source: AQF Council 2011, p. 25 & p. 37)

The work of VET practitioners is widely acknowledged to be complex (e.g. Chappell 2004), while analysis of labour market and broader economic trends in Australia indicate that the complexity of demands on practitioners is set to increase. Chappell (2004) emphasises (in similar terms to the draft Productivity Commission report,

- increasing complexity in industry itself, the nature of work and work organisation with which VET practitioners engage;
- a shift of emphasis from technical to 'behavioural'/'soft'/'generic' skills required in the workplace;
- developments in learning theory that have expanded the knowledge base of VET practice; and
- the emergence of new concepts of knowledge itself, including the 'knowledge economy' and the 'knowledge worker'.

In the light of new and greater demands on VET practitioners in the medium-term, the kind of knowledge and skills required by them is situated more clearly within AQF Level 7 than Level 4. Specifically, the need for a broad *and coherent* theoretical and practical foundation for practice is entailed by the demands of VET practice. The ability to analyse and evaluate information with respect to unpredictable and complex problems is clearly required of VET practitioners, while 'well developed judgement and responsibility...in contexts that require self-directed work and learning' are capabilities that would appear to be necessary in the context of the expectation that VET practitioners will do more of their work in the workplace in future (Productivity Commission Draft Report on the VET Workforce, Sec.6). In contrast, the AQF Level 4 descriptors present a narrower knowledge base and application of skills more appropriate to a less complex environment, and possibly more traditional models of teaching conducive to higher levels of routine.

An argument may be made that VET-sector Diploma qualifications (AQF level 5) might suffice, and that the Diploma qualification within the Training and Education Training Package is currently being revised and improved. We recognise the contribution this qualification will make to the up-skilling of the VET workforce, but argue that as a competency-based qualification it exhibits all the limitations of CBT as discussed above, and moreover is two AQF levels below the degree-level qualification descriptors discussed above.

Further, university programs are delivered by a collective of expert thinkers in fields such as learning, pedagogy, curriculum and discipline knowledge, bringing multiple viewpoints and orientations to the work of VET Teacher and Trainers. Moreover, a university qualification offers pathways for further learning (eg to Masters or PhD) which are not available from a VET-sector Diploma. A progression from the Certificate IV through the Diploma and onto a university qualification provides a pathway to accommodate all instances.

5. POTENTIAL BARRIERS TO VET PRACTITIONERS ACCESSING UNIVERSITY VET TEACHING QUALIFICATIONS

The potential barriers to VET educators gaining university teaching qualifications can be summarised into three main categories: the nature of the VET workforce and its career pathways; the attitudes and priorities of members of the VET workforce to their qualifications and professional development; and the perceived suitability of the current structure of university teaching/training qualifications for the VET workforce. A further matter is the large proportion of casual staff in the workforce.

The VET workforce and career structure

The career stage and pathways of the VET workforce may be a barrier to VET educators gaining university VET qualifications. The VET workforce has particular characteristics compared with the workforces of other education sectors. Most VET educators move into VET teaching after establishing themselves in a career

within another industry, (Dickie, Eccles, FitzGerald, McDonald, Cully, Blythe, Stanwick & Brooks 2004, p.84). These 'second career' educators transition into VET teaching from a wide variety of organisations including small and large business enterprises, industry associations, adult education organisations, schools, universities and government departments. (Simons, Harris, Pudney & Clayton, 2009). They tend to be older than their other education workforce counterparts. They may have significant family responsibilities.

The beginning of a VET teaching career often occurs at a later stage in educators' lives and is sometimes characterised by a transition period of casual or contract work (Harris, Simons & Clayton 2005) and increasingly higher percentages of part-time work. Throughout and often beyond the transition period to VET teaching, most VET educators keep strong professional connections to their original occupation (Simons *et al* 2009, p45). They may therefore value development in their industry area more highly than that in teaching/training.

Attitudes and priorities to professional development and qualifications

The attitudes and priorities held by the VET workforce to professional development and qualifications and the level of access to professional development may be a barrier to VET educators gaining university VET qualifications. Simons *et al*'s (2009) research into careers in VET suggested that:

- Accessing more formal learning opportunities seemed to be perceived as problematic for VET teachers as a consequence of the way their work was organised;
- Experiential and informal professional development was seen as important as a way of trying to stay current; and
- Networking and establishing and maintaining contact with industry were emphasised as important strategies for ongoing career development.

Guthrie (2010) considers that the emphasis on learning in the workplace, for VET learners, may transfer into a perception that off-the-job learning for VET teachers is inferior to on-the-job learning. There may also be an element of inter-sectoral rivalry in a reluctance to undertake higher education qualifications, which might be underpinned by a perception that in former times university VET teaching/training courses were of variable quality (Guthrie, 2010). There may also be an expectation, amongst the TAFE workforce in particular, that higher-level qualifications should be paid for by the employer.

Perceived suitability of the current structure of university teaching/training courses for the VET workforce

In their busy lives, VET educators may imagine that they do not have time to undertake what they may perceive as traditional higher education courses of study. They may be unaware that VET teaching/training qualifications are tailored for the VET workforce and are generally offered flexibly, often at a distance, and with credit available for the typical qualifications that VET practitioners have. Thus the barrier may not be the actual structure but rather perceptions of the structure. Those with lower-level industry qualifications may feel that the academic requirements of a university course are beyond them. Again, university VET teaching/training courses do offer provision and support for such students but this might not be widely known. Finally, they may be confused by the perceived lack of consistency and nomenclature among the university qualifications.

Large proportion of casual staff

While VET is by no means unique among industries in its proportion of casual staff, working casually does offer some barriers to accessing higher qualifications. VET educators may not consider investment in a higher level qualification will reap financial benefits or guarantee security of work, or, if wishing for a permanent career in VET, may not consider that a higher-level qualification will help them achieve that goal.

Table 4. The barriers to accessing higher-level teaching/training qualifications and possible solutions

Barrier	Possible solutions
The stage of their career and experience does not juxtapose well with commencing a Higher Education degree	Staged progression through Diploma to university qualification.
Attitude to professional development	More consistency in the messages sent at national, State and RTO level about the need for teaching/training development beyond the Certificate IV, and its importance vis a vis industry currency. Education about shared responsibility for qualifications.
Perceived suitability of the current structure of university teaching/training courses for the VET workforce	Better information flows about the nature of university teaching/training qualifications, arising from close collaboration between the VET sector and universities delivering VET teacher-training. More collaboration among universities to align courses and use consistent nomenclature.
Large proportion of casual staff	RTOs can offer incentives to casual staff to complete higher-level qualifications, and can give preference to more highly-qualified applicants when recruiting permanent teachers and trainers. Such RTOs may become 'employers of choice'.

Guthrie (2010) also refers to '*an environment which downplayed the importance and value of teaching and of teachers in decision-making processes in formulating both policy and practice*' which was pronounced in the early years of competency-based training in the 1990s. While this trend has reversed to some extent there is still a residual lack of emphasis on pedagogy, or 'invisibility' of teachers/trainers in official VET documents, which was earlier noted by teachers interviewed in Lowrie *et al* (1999). This culture may send signals to new practitioners that conflict with a more recent emphasis on the need for more development.

6. COMMENTS ON SPECIFIC POINTS IN THE DRAFT REPORT

There are four specific points in the draft report with which we wish to make comment and hope that with the presentation of improved evidence that consideration will be given to significant redrafting of these sections in the final report. This is proposed in a collegial manner that is designed to enhance the quality work to date.

P XLVI Indirect evidence that teacher qualifications does not explain variance in teacher effectiveness as measured in student outcomes.

This conclusion is based on a paper by Leigh (2010) that compares outcomes of students taught by school teachers holding bachelors and masters degrees respectively. However, masters courses in education are not teaching qualifications and so the comparison is problematic. Leigh (2010) hedges his conclusion with many limitations, and the particular contention is only a minor part of the paper. The US research that Leigh (2010) cites has the similar limitations. It is difficult to make comparisons with the VET sector because most assessment is competency based with a pass or fail result and therefore different student outcomes cannot be compared. This is not to say that we would not support appropriate research into the difference between Certificate IV and university-qualified VET teachers. This is a body of research that could be completed in the near future in support of the proposed enhancement of VET teacher's qualifications and in keeping with government's agenda to enable more Australians to participate in broader education.

P XLVI There was general agreement that the [Certificate IV] represents an adequate entry-level standard for VET teaching and assessing,

This statement is taken from the recent research study by Clayton *et al* (2010) and appears to overlook the caveats made by the authors. These are that the Certificate IV had best results when delivered to those who already had training experience; and that the majority of the participants had expected to learn 'how to teach' (Clayton *et al*, 2010: 8) and had found that the qualification provided no such assistance.

P XLVI High satisfaction ratings recorded by the VET sector.

This statement is based on the SEUV data. These data cannot be used to infer high satisfaction of employers with VET teachers. We are concerned that as there are no questions in the Survey of Employer Use and Views of the VET System (SEUV) survey about employers' satisfaction with VET teachers/trainers that would support this statement. There are questions about satisfaction or lack of satisfaction with RTO, but none about satisfaction with teachers or indeed about their teaching.

P 3.9 58% of TAFE teachers 92% of non-TAFE VET teachers/trainers do not have educational qualifications.

This statement is based on a paper by Guthrie and Mlotkowski (2008) which draws upon the Survey of Education & Training (SET) data. These data are prepared for a different purpose, and the method of the SET data collection makes it quite likely that a Certificate IV in TAA or BSZ would not be mentioned. The data do not accord with generally held beliefs about qualification levels of VET teachers/trainers, and seem particularly unlikely for private RTOs, whose job advertisements always require a Certificate IV. They do not form a good basis for decision making about training needs for vocational educators.

Some firm evidence about lack of satisfaction with a Certificate level qualification as the basis for VET teaching is provided by a study by Seddon, Penna & Dart (2004) which investigated the place of education qualifications in the 'development and recognition of the skills required in modern TAFE settings' (p. 5). From

a representative sample of 1,675 teachers, formal educational qualifications were considered to be of high-level importance in effectiveness as a TAFE teacher. 85% of teachers and 90% of managers supported the engagement by teachers in higher-level teaching qualifications. Bachelors and Graduate Diploma qualifications were considered to be the most useful qualifications in contributing to teacher capability.

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Appendix 1: ACDE VET WORKING PARTY

ACDE nominated representatives from member universities to form a Working Party (Chaired by Professor Erica Smith) to respond to the draft report issued in November 2010. This group has addressed only the issue of VET teaching qualifications in teaching/training.

Representatives of the Working Party (Convened by Professor Erica Smith) met with the Productivity Commission at the Melbourne offices on 31 January for an in-depth discussion. Professor Smith was also invited to the 21 February consultation.

Membership of ACDE VET Teacher Qualifications Working Party

Dr Donald Adams	The University of Newcastle
Professor Tania Aspland	The University of Adelaide
A/Prof Roslin Brennan Kemmis	Charles Sturt University
Dr Michael Brown	La Trobe University
Dr Allie Clemans	Monash University
Mrs Jillian Downing	University of Tasmania
Dr Barry Fields	University of Southern Queensland
A/Prof Bobby Harreveld	Central Queensland University
Dr Steven Hodge	Deakin University
Dr Ian James	Griffith University
Dr Ann Kelly	Griffith University
Ms Claire Kilgariff	Batchelor Institute
Dr John O'Rourke	Edith Cowan University
Dr Peter Rushbrook	Charles Sturt University
A/Prof Michele Simons	University of South Australia
Professor Erica Smith (Chair)	University of Ballarat
Dr Keiko Yasukawa	University of Technology Sydney

Appendix 2: GERMAN QUALIFICATIONS IN VET TEACHING/TRAINING

Professor Thomas Deissinger, University of Konstanz, Germany

One has to distinguish between VET teachers and VET professionals in companies, although teachers sometimes decide to enter a company and become a training manager.

The first group are state civil servants (quite well paid), the latter come from different professional backgrounds and do not need to be higher education graduates.

(1) VET Teacher Training in Germany

VET teachers in Germany work in vocational schools, both full-time and part-time (apprenticeship), which form a system building up on the general education system as it also contains specific progression routes for young people graduating from secondary schools. Professional training for VET teachers in the commercial and technical subjects used to lead to either a Diploma or a state examination. With the Bologna System, it is now a Master Degree which functions as prerequisite for entering the teaching service. In the case of the federal state of Baden-Wuerttemberg, with three universities involved in the training of business teachers working in vocational schools (Konstanz, Mannheim and Stuttgart-Hohenheim), teacher training leads to a Master Degree (M.A. or M.Sc.) in Business Education (formerly: Diplom-Handelslehrer). This qualification is accepted in all federal states as an entry requirement for the teaching profession in the VET system. Normally, Master Degrees are acquired at universities, although some pedagogical academies offer it as well (normally in co-operation with a polytechnic).

As an example, at the University of Konstanz, Business Education (Wirtschafts-paedagogik) is offered as a full-time Master course in the Faculty of Business and Economics for a duration of 4 semesters, building up on a Bachelor Degree in either Business Education or Business/Economics. It comprises three major subject areas: Business Administration and Economics; Vocational Pedagogy and Didactics; plus an optional general subject such as German, Mathematics or Foreign Languages (70% of students opt for this optional subject). In most universities, this is supplemented by the option of studying on with Business and Economics instead of a general subject (from summer 2011 on also in Konstanz).

There are a number of distinctive features of this system that include the obligation to take up an internship in a company (which amounts to 42 weeks at the moment) and compulsory teaching placements in a vocational school for 10 weeks during the university courses (though not during the lecture periods). The 'second stage' of teacher training requires all this and supplements the preceding university studies under direct supervision of the federal school ministries (as employers of VET teachers). It consists of a one and a half year course in which the student teacher works in a vocational school while attending theoretical courses in didactics and school pedagogy run by the federal state seminar institutions.

Students of Business Education, with a female share of more than 50 percent, normally hold a general Abitur qualification (higher secondary school examination) – either from a general or vocational high school, while quite a number of students also have gone through the Dual System/apprenticeship system or (with the Bachelor courses) have graduated from a vocational academy (higher type of Dual System), mainly as commercial apprentices in banking or insurance, before entering the university. This qualification is now more likely to exist with incoming Master students as young people with different Bachelor backgrounds (university, vocational academy, polytechnic) can apply for a Master course in Business Education.

So the overall duration of training to become a vocational teacher in Germany is 5 years at university plus 1.5 years with the federal state (seminar training). Pedagogy and Didactics play a major role in both training periods.

(2) VET professionals in companies in Germany

Normally, these people have a professional background (banking, engineering, crafts), but they also need to pass a chamber examination, following (normally) a part-time course which is offered either by the chambers or private training organisations. This course deals with VET topics, including teaching and learning, law, educational management etc. Many of these people are non-academics, as they stem from the Dual System

or have been trained as master craftsmen (in Germany, the master craftsman course includes the training qualification).

Trainer qualifications are handled by the Vocational Training Act which not only stipulates the rights and duties of trainees and training companies, but also prescribes the personal and technical skills of training personnel. For this purpose, the Act distinguishes between the trainer and the person or firm taking on apprentices. The „personal aptitude“ (persönliche Eignung) means that a person must not have contravened the Vocational Training Act and must not be disallowed to employ children. However, a person/firm engaging in apprenticeships also has to prove the competence for instructing the apprentice at the training site, called the „technical aptitude“ (fachliche Eignung), i.e. has to employ a training officer who possesses the necessary personal and technical skills to provide the training. Therefore the trainer himself, besides his „personal aptitude“, must avail of technical, i.e. occupational and pedagogical abilities and knowledge, which means that he has to be an expert in his occupation and that he has acquired educational and psychological skills including the application of appropriate teaching and instruction methods. Recently, the trainer qualification ordinance of 1972 (Ausbildereignungsverordnung) has been revised by the Federal Government.

The normal length of trainer courses is 115 learning hours while the organisation depends on the individual supplier of the training.