# The master artisan: a framework for master tradespeople in Australia

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Participant in the NCVER Building Research Capacity Community of Practice Scholarship Program 2010

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# About the research

### The master artisan: a framework for master tradespeople in Australia

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Building the research capacity of the vocational education and training (VET) sector is a key concern for the National Centre for Vocational Education Research (NCVER). To assist with this objective, NCVER supports a community of practice scholarship program, whereby VET practitioners without research experience are given the opportunity to undertake their own research to address a workplace problem. Scholarship recipients are supported by a mentor, and NCVER publishes their research results.

Karen O'Reilly-Briggs participated in the 2010 community of practice program. Karen is a metal fabrication, welding and engineering teacher at Swinburne School of Engineering, Technology and Trades. Karen's research explores the views and opinions of senior industry and education professionals on the introduction of a 'master' level program for tradespeople into the Australian curriculum.

The impetus for the research is the assumption that the introduction of a master-level qualification would improve pathways and opportunities for tradespeople in Australia by opening up advanced levels of learning and attainment for the highly experienced. The author argues that formal recognition of experience and expertise will lead to increased esteem for trade vocations, which is important if trades are to improve their standing in the community.

The trade industry representatives and education professionals in the focus groups were generally supportive of the introduction of a master-level qualification.

One question which is beyond the scope of Ms O'Reilly-Briggs's project is whether there would be sufficient demand for such a qualification to make it viable. While the concept of a master artisan is well established in a number of European countries, it is not one that has ready currency in Australia. The question that needs to be asked is whether employers will pay the premium that would need to be attached to the qualification to make it worth doing — and will providers be brave enough to offer such a qualification?

Tom Karmel Managing Director, NCVER

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# Introduction

A master qualification for tradespeople is not a new concept. In certain parts of Europe, experienced tradespeople who excel in their field are able to access education and pathways to elevate their status. They are treated in the same way as those who receive doctorates (Ferguson 2006), and also have important status in the international community. This paper advances the proposition that the absence of equivalent educational pathways and career development opportunities for Australian tradespeople assists to reinforce negative social perceptions of manual occupations – perceptions that are now arguably reflected by serious skill shortages.

Trades skill shortages have made vocational education stakeholders look at the reasons why young people may not find traditional trades occupations attractive career options. In the age of the technological revolution, what incentive is there for any parent to encourage their child to pursue a career often believed to be 'dirty, dangerous and demeaning'?

This paper investigates the potential for introducing master-level qualifications for tradespeople in Australia as a means of improving the status of tradespeople and strengthening trade identity.

We need to continue to focus on raising the status of VET, to again arouse interest in the traditional trades and to correct the perception that they are dirty, dangerous and demeaning – that they are somehow second-rate options ... one of the problems has been the issue of perception and status. (Bartlett 2004)

Perceptions do not exist in a vacuum. They are understandings based on social observations, often reinforced by the promotion of stereotypes by the popular media: the plumber with the 'ever-visible bum-crack'; the construction worker on the back of his ute drinking a cappuccino sarcastically proclaiming how he now feels 'like part of the in-crowd' (Hungry Jacks Australia 2010); and the builder with his 'salady-stuff ... girlfriend approved' sandwich (Subway 2011).

Government policy does not appear to address these negative stereotypes and could even be complicit in the erosion of professional identity. One example of the perceived deterioration in trade identity and the trade frameworks discussed in this paper is the absence of trade qualification credentials – or 'trade papers'.

This research explores the views and opinions of senior trade industry and education professionals on the concept of introducing a master-level program into the Australian curriculum.

It also explores the potential for opening up advanced levels of learning and attainment for the highly experienced, investigating whether the introduction of a master trade or master artisan qualification will lead to greater prospects for tradespeople and increased esteem for trade vocations within the community.

Although the aim of this investigation was to examine the viability of introducing an educational framework for master artisans, what ultimately emerged from the research was a strong theme relating to the erosion of trade identity and trade structures in Australia. As a result of this unexpected direction, the paper also considers issues relevant to the impact of this erosion and its bearing on the implementation of the master trade concept.

For the purpose of the study, the word 'artisan' describes any skilled manual worker who employs creative thinking, dexterity and specialised knowledge to make functional or decorative items. This definition includes both tradespeople and craftworkers. The words artisan, tradesperson and craftworker are used interchangeably throughout this paper.

# Literature review

This section will present an outline of the conceptual framework that underpins this study, starting with a discussion of apprenticeships – the beginning of the master artisan's journey. It does so in the context of the latest reviews of Australia's tertiary education frameworks, *A shared responsibility, apprenticeships for the 21st century* (McDowell et al. 2011), a Commonwealth report examining the current state of the Australian apprenticeship system, and the Review of Australian Higher Education chaired by Professor Denise Bradley in 2008.

### Apprenticeships for the 21st century

The report on apprenticeships by McDowell et al. (2011) acknowledges that apprenticeships directly contribute to the quality of our skilled trades workforce and therefore our ability to compete successfully in a global marketplace. The report discusses the 'baffling' complexities of contemporary apprenticeship training arrangements, which are currently divided between the Commonwealth Government and state and territory governments. It also supports a move to align these jurisdictions, as well the implementation of a '"National Custodian" ... that can maintain a national framework' (McDowell et al. 2011, p.12) to assist in overcoming the difficulties associated with the present system.

McDowell et al. (2011, p.8) identify a number of areas in the apprenticeship system requiring urgent attention, including 'retention, completion outcomes and [its] impact on productivity and innovation', emphasising the need for all stakeholders to share the responsibility for providing apprentices with transferable skills, explaining that the benefit would be an improvement in the quality of apprenticeship training. The report predicts that the flow-on effect from these changes will assist in ameliorating skills shortages and improving apprenticeship completion rate statistics, which are currently as low as 48%.

The perception of apprenticeships in the community as an undervalued career option is also emphasised by McDowell et al. (2011), who argue for a strategy to improve the current status of trade apprenticeships.

[Apprenticeships] are often perceived as physically demanding, unsafe, dirty and poorly paid. Australian Apprentices are often viewed as being from a lower socio-economic background, without the capabilities to enter university (p.13).

McDowell et al. suggest that promoting apprenticeships to represent 'a pathway toward a satisfying career' will provide incentives for people considering a vocation in a traditional trade. The concern here is whether this invitation is backed with substance.

Until relatively recently there were few educational and career pathways for trade apprentices in Australia. Since the 1990s, we have seen the introduction of post-trade courses such as certificate IV and diploma; however, there is still debate about whether these are career pathways or expensive roads to nowhere. McDowell et al. (2011) outline the importance of developing further career opportunities for tradespeople and urge both apprentices and employers to embrace the idea of pathways and career development as a means of improving job desirability. The authors argue that this will eventually lead to greater national productivity and, ultimately, an improved national economy (p.31).

It would appear that some of the obstacles that stand in the way of tradespeople continuing with educational and career pathways may be integral to the tertiary sector itself.

The development of the Modern Australian Apprenticeship and Traineeship System (MAATS), announced and funded in 1996, was a key element of the federal government's training strategy, whose aim was to modernise training for vocations and thus make training more attractive to businesses. The main objective of the modernised system was to expand employment and career opportunities and increase international competitiveness. It aimed to do this by encouraging flexibility, improving options and enhancing workforce skills. Industry was given the opportunity and responsibility for developing training packages and leading the way forward. This new process promised to shift the focus from centrally controlled training agreements and courses to more flexible training packages delivered within the Australian Qualifications Framework (AQF). This new qualifications structure was designed to replace old qualifications structures by encompassing the vocational, senior secondary and higher education sectors. The introduction of this system confused many stakeholders, and it took some time for industry to grasp its complexities. While industry and other stakeholders were still coming to grips with the new arrangements, the history, pride and the richness of the professional identity associated with being a trades or craftsperson were being eroded. Although the Australian Qualifications Framework promised to incorporate apprenticeships 'fully in the new framework to facilitate national portability and recognition' (Department of Employment, Education, Training and Youth Affairs 1996, p.25), there was no provision for the declaration of a trade vocation or recognition of any sort that distinguished traditional trade qualifications from other certificate level III qualifications. At that time representatives from the Australian Manufacturing Workers Union expressed concern about the negative impact of the removal of the 'declaration of trades' from the Modern Australian Apprenticeship and Traineeship System:

With the removal of declared trades this will mean [that] narrow qualifications without real portability or recognition can be offered as qualifications in trade areas. (Roe 1997a, p.3)

Further to the removal of the declaration of trades, the states were instructed to cease issuing trade papers to graduating apprentices, as 'The issuance of certificates is ... inconsistent with the provisions of the Australian Qualifications Framework (AQF) which requires that only a single AQF qualification be issued' (Office of Training and Further Education 1997, p.8). As this paper argues, that no trade papers are issued is still a contentious matter for industry and tradespeople, as these papers represent much more than simply an educational qualification.

Further to this situation, additional damage to the image of trade occupations emerged, with the introduction of Australian Workplace Agreements. In June 1997, the National Training Framework Committee delivered a report to the Australian Council of Trade Unions outlining concern that the federal government was encouraging the employment of apprentices under Australian Workplace Agreements rather than under the award. 'These apprentices are the most vulnerable in the community and that exploitation and damage to the image of apprenticeship ... is the inevitable result' (Roe 1997b, p.7).

At this time, the employment conditions for new apprentices were becoming increasingly tenuous. In response to this situation, the Australian National Training Authority (ANTA) commissioned an investigation into the barriers to the training of apprentices.

Marshman's review of apprenticeships (1998) for ANTA concludes that the image and status of trades was at 'an all time low ebb' (p.11) and that there was a perception that governments are not committed to traditional trades, and 'are expending enormous bureaucratic and intellectual effort in

the development of the Modern Australian Apprenticeship and ... [Traineeship] System (MAATS) - about which there is still limited or no understanding' (p.17).

With the abolition of the declaration of trades and trade certificates, the weakening employment conditions for apprentices, and the general confusion over the new qualifications framework, the image and status of the traditional trades was facing a predicament.

Wiles, in a 2000 report for Job Watch, exposed further inequities, claiming that: 'a strengthening of provisions in the VET Act is essential to return integrity and public confidence to the apprenticeship system' (2000, p.17). The report highlighted a large list of endemic problems and a plethora of inequities confronting apprentices, such as sham contracts; poor levels of training; underpayment; bullying and workplace violence; arbitrary dismissal, and much more. With so many problems besetting apprenticeships at that time, is it any wonder that the community viewed the trades as a second-rate option?

#### Review of Australian higher education

In March 2008, the federal minister for education initiated the Review of Australian Higher Education (Bradley 2008). This review aimed to examine the direction of the higher education sector (including VET), with a view to assessing its suitability for meeting the needs of the community and the Australian economy.

The Bradley Review (2008, p.xi) concluded:

There is an international consensus that the reach, quality and performance of a nation's higher education system ... [are] key determinants of its economic and social progress. If we are to maintain our high standard of living, underpinned by a robust democracy and a civil and just society, we need an outstanding, internationally competitive higher education system.

Given that there are strong links between a nation's education and its economy (Richardson & Teese 2008; KPMG Econtech 2010), the Bradley Review sought to investigate the current state of Australia's higher education sector and to assess this against the nation's present ability to adapt and flourish in the fast-moving 'knowledge and innovation' focused global economy.

The Bradley Review (2008) concluded that Australia is falling behind other countries in performance and investment in higher education, and that the current 'quality of the educational experience is declining' (p.xii). If we are to improve Australia's competitive advantage, decisive and immediate action is needed to reform the regulatory framework of higher education. It recommended a 'wellcoordinated, systemic approach to addressing these complex issues and [that] increasing the numbers gaining qualifications is vital' (p.xii). The report urged the importance of improving the current quality of education in Australia, with advice to turn the 'rhetoric of lifelong learning into a reality' (p.xii).

Arguably, a well-coordinated and systemic approach to higher-level degree qualifications in the vocational education sector for the purpose of contributing to a well-educated, knowledgeable, and innovative workforce is in itself one solution for rectifying such shortfalls, one that was supported by Bradley's recommendation to improve the national framework by progressively extending 'the tertiary entitlement to the vocational education and training (VET) sector, commencing with higher level VET qualifications' (2008, p.xiv). Interestingly, much of the limited literature on these issues appears to make assumptions about educational pathways in the tertiary sector: that there is only one possible framework or pathway for progression — from TAFE to university.

The Review of Australian Higher Education (2008) promotes the need for closer links between sectors and acknowledges that, even though much effort has been dedicated to this goal in the past, 'structural rigidities' (p.179) exist, including significant differences in approach to curriculum and teaching methods that prevent transition toward an integrated relationship. The report states that a better interface between sectors is vital and that 'it is no longer helpful to see stark contrasts between higher education and VET in the level and types of qualifications they deliver' (p.180) and acknowledges that 'VET has responded to the demands of industry for higher level skills by refocusing on ... advanced training' (Bradley 2008, p.180, quoting Richardson & Teese 2008). Although supporting the view that it is critical the sectors remain distinct, Bradley claims that there is a need for flexibility between sectors to cater for 'economic and social needs which are dynamic and not readily defined by sectoral boundaries' (p.180). These arguments coincidentally complement the master artisan pathway concept, as the program has the potential to reside as a 'cross sectoral' vocationally based higher-level qualification. Such a qualification would cater for needs not readily defined by sectoral boundaries and defying 'structural rigidities', while maintaining the 'critical' divide.

#### Higher education in TAFE

The report *Higher education in TAFE* (Moodie et al. 2009) is one of very few reports that investigates higher education programs offered by vocational education institutes in Australia. It discusses areas in need of further consideration by TAFE (technical and further education) institutes in light of these new offerings.

The authors identified many of the key debates, dilemmas and issues relating to higher degree courses in TAFE, and concluded that 'the key rationale for TAFE's higher education programs is to meet specific industry needs' (Moodie et al. 2009, p.21).

A debate of significance to this discussion is whether or not TAFE should capitalise on the 'blurring of boundaries' with higher education. The report perceives that TAFE higher education degrees may be viewed in the community as second-rate or a poor alternative to a university-acquired education, as a result of TAFE's (and VET's) reported 'image problem' (James 2000, p.viii), a view reiterated in Kell's (2006) report for the Australian Education Union on TAFE futures and also by the Department of Education, Employment and Workplace Relations (2008) on VET in Schools (p.145). Wheelahan et al. (2009) suggest that it is better to be seen as a 'leader in your own area than at the bottom of the pile in another sector' (p.23). They propose that TAFE can improve its image by promoting the integrity of its pathways toward prestigious educational and occupational outcomes. In their view, TAFE's higher education qualifications are, in the main, intellectually rigorous. In focusing on a wider range of workplace experiences than other university offerings, these programs provide students with greater opportunities to blend theory and practice.

One of the challenges noted in the report is that of the 'intellectual jump' necessary for those moving between a competency-based environment to a more theoretical one. The report claimed that students from VET 'were challenged because they had to learn to use theory, develop arguments, integrate and synthesise knowledge and operate at a higher intellectual level than they were used to' (p.25). Although pedagogical and curriculum differences no doubt exist between sectors, it would be inappropriate to assume tradespeople lack the intellectual ability to participate in a theoretical environment.

As TAFE continues to expand and introduce a greater number of higher-level degree subjects for study, it may eventually find itself in a position to reinvent and remarket its capabilities as a leader of

high-quality industry-relevant research and development, equal to (but with a vocational focus that differentiates it from) university. For these reasons, it is important that TAFE is acknowledged for its contribution to research and its delivery of higher education, and is thus provided with appropriate infrastructure, block grants, a voice on research councils and 'tertiary entitlement'. With acknowledgment and recognition of its capabilities, TAFE will be in a position to introduce itself as the pioneer of trade and industry-focused degrees in the educational landscape. Establishing 'collaborations with global research networks' (Bradley 2008, p.12) and international industry partnerships will be especially important for artisans investigating and introducing new technologies and innovations from overseas.

The introduction of a higher education degree program — like the 'master artisan' program for tradespeople — to the TAFE environment could play an important role in contributing to vocationally oriented research. However, the concept of the introduction of a higher education program for tradespeople also highlights a number of fundamental educational and governance challenges. Such issues will need careful consideration prior to the implementation of any master artisan program.

# Methodological framework

This study investigated the views and opinions of senior industry representatives and professional educators on the concept of introducing a master-level program for Australian tradespeople. All participants in this study are professionals in their field and hold positions of importance and relevance to the education, training and professional development of apprentices and tradespeople.

The primary objectives of the research data collection process were to:

- develop the master artisan concept
- discuss the viability of introducing a master-level program for tradespeople in Australia.

The study was guided by the following questions:

- How do we define a master artisan/tradesperson?
- Would the introduction of a master trade program contribute to the status and effectiveness of Australia's skilled labour force?
- What skills and attributes should a master artisan/tradesperson possess?

### Research method

The study sought to explore and develop the concept of a master artisan in the Australian context, as conceptualised by participants. As the exploration of concepts was a significant component of this research, it was determined that a qualitative, grounded (Punch 1998) ethnographic-inquiry approach, utilising theoretical sampling (Strauss 1998), would provide the richest source of information.

#### Data collection

A small sample of relevant organisations representing education and industry were identified and invited to participate in two focus groups. Participants were advised that their participation in the research was voluntary and confidential and that they were free to withdraw at any time. All participants were required to sign a participant consent form at the outset of focus group meetings, and the study was approved by Swinburne's Human Research Ethics Committee (SUHREC2010/118).

During the focus group sessions, participants were audio-recorded and the discussion was later converted to a transcript; the researcher took notes. In compliance with routine research ethics guidelines, coding for anonymity disguised the identities of participants.

The two focus group sessions were conducted at Swinburne University of Technology; they ran for two hours and were facilitated by the researcher. The first group comprised five industry representatives from organisations dependent on the quality of their trade-skilled workforce.

The second group consisted of five highly experienced educators involved in vocational education for apprentices and tradespeople.

Both groups were given a presentation and provided with explanatory material to outline the objectives of the focus group, as well as information on vocational education in Australia and the German Master Craft qualification. Participants were then presented with a series of open-ended questions on the 'master artisan' concept, including questions on the viability of introducing a

comparable program to Australia. The focus groups comprised mostly Victorian participants; however, other states were represented.

The transcripts of the discussions were assessed and organised by theme; then a 'read, re-read' technique was applied to further develop themes, adapted from Hargreaves's (1995) study of the culture of teaching. In order to maintain and present the participant voice, this method limits the presentation of data to a deliberately descriptive model.

#### Limitations

In the absence of a master class of tradespeople in the Australian context, discussion of the concept (including its viability) was often limited to exploring 'known' frameworks rather than 'new' opportunities.

As the sample size was small, this study is considered to be a snapshot of industry expert opinion on the concept of introducing a master trade program to the Australian tertiary sector. Only two representatives in the second focus group meeting did not attend on the day of the focus groups.

As an exploratory study, the project was most effective; however, the findings are specific to the project and therefore cannot be generalised.

# Data and participant voices

### Developing the master artisan concept

Trade occupations in Australia cover a broad range of occupational fields. Given the vast array of skills, knowledge, industries and occupational variations across trades, the research took a broad approach to the data collection process and sought the input of education professionals as well as industry representatives from a variety of occupations and educational institutes. Both focus groups brought significant and valuable industry experience to the discussion on the concept of introducing master trade/artisan recognition to Australia. As noted in the previous chapter, all participants had been provided with information about the concept of a master trade qualification and many expressed a genuine interest in the idea. Where it was considered appropriate, participants explained the differences between their own opinions and those of the organisations they represented.

In the absence of an Australian model of master tradesperson, it was important at the outset to develop a conceptual image of a master artisan, before considering how a framework might potentially be implemented. Prior to the focus group discussions, all participants were asked to share their thoughts on how they envisaged a master artisan. This activity aimed to develop a general picture from which to generate further group discussion and develop ideas about how and if this picture could be implemented in an industrial and educational landscape.

The following are some of the individual understandings of the concept of a master artisan held by focus group participants:<sup>1</sup>

A master craftsman ... sits in a hierarchy over and above a qualified tradesperson. (IFG1 p.5)

It is the passion, as the passion blurts out, the eyes light up when they talk or do whatever they're doing. (EFG5 p.9)

In the sphere of trades, you actually problem solve, and problem solving is about designing things, it's about changing things or making it better ... I see that person having high values, strong disciplines, respect, and knowledge. (EFG4 p.9)

Bordering between the technique of the trade and where they are able to move that into an artistic sort of ... product or innovation ... it's about their ability to translate the techniques and the skills and the capabilities they have to make something new. (EFG5 p.9)

Charts have been compiled from evidence obtained from the comments, both written and from discussions, made during the focus group sessions (see appendix tables 1 and 2).

Findings from the focus groups suggest that a master artisan is a person who is innovative and creative, who possesses highly specialised knowledge of their trade and exhibits great expertise and passion for their craft. He or she is concerned with aesthetics as well as functionality and has high-level cognitive skills and independent problem-solving capability. A master artisan gains a sense of achievement from their work and their craft is likely to be integral to their identity. The master artisan is a highly skilled craftsperson who is respected and who occupies a class over and above the base-level tradesperson.

Other attributes included in the individual participant responses include: relishes complexity; is highly responsible; is autonomous and accountable; has an in-depth understanding of technologies;

<sup>&</sup>lt;sup>1</sup> IFG = Industry focus group; EFG = Education focus group.

undertakes professional and/or personal development; may not necessarily be a good communicator; has public speaking ability; is socially inclusive; has research ability; undertakes critical analysis of own and others' outputs and practice.

Although the master artisan is to be a specialist in their profession, the potential limitation of this construct may be the industry participants' lack of a strategic view or understanding of how these skills fit into larger systems of industry, education and the economy.

Overall, both focus groups acknowledged the value of the general concept of a framework for master tradespeople in Australia; however, the idea presented a number of logistical concerns for participants.

#### Perceptions on the erosion of the trades

A discussion of significance to the industry focus group centred on the current trade training framework and recognition systems in Australia, and the belief that some trades are in the process of being broken down, contributing to either a real or perceived erosion of trades and trade identity in Australia. Some of the industry representatives expressed their concern that their trade skills and identity were increasingly less valued in the community, conveyed through statements such as:

I see my trade starting to dwindle away bit by bit ... and it's becoming less and less valued and less and less kids are coming in. (IFG2 p.7)

The perceived deterioration of trades and their frameworks was discussed by participants in the context of an absence of trade qualification credentials — or 'trade papers'. In the past, trade papers were awarded to tradespeople on successful completion of their apprenticeship. The presentation of trade papers formalised the graduation process — from apprentice to qualified tradesperson. Industry focus group participants who had come from a trade background expressed frustration with the present situation, whereby there is no legislative authority responsible for the issuing of trade papers, although Victoria has reintroduced an arrangement to issue apprenticeship 'Confirmation of Completion' certificates through VET Assess, a Victorian assessment organisation, subject to a fee-forservice arrangement with industry. Trade papers provided tradespeople with a symbol of trade accomplishment and gave them a sense of pride and professional identity. As expressed by one trade-qualified representative of the manufacturing industry, tradespeople view their professional identity in the following way:

Years and years ago ... we did have a qualifications board that signed my papers up, I've still got it in the tube, I've only ever had it out once you know, and it's got a seal on it, and mate, I've got to tell you, I'm proud of that document. (IFG2 p.14)

The education industry representatives also expressed concern that 'trade certificates will no longer be issued for apprentices who sign training contracts' (Department of Education and Training 2009). Both focus groups expressed the opinion that there is still a strong industry demand for trade papers (or trade certificates), and voiced concern that these are no longer issued to people who have completed an apprenticeship in a traditional trade area.

As each state and territory is governed by separate training authorities, there are different arrangements for the issuing of certificates of completion for apprentices. Currently, Victoria, South Australia, New South Wales, and Queensland offer apprenticeship completion certificates; Tasmania, the Northern Territory and the Australian Capital Territory do not and Western Australia is in the process of doing away with apprenticeship completion certificates, only issuing them to apprentices indentured prior to 10 June 2009 (Department of Education and Training 2009).

Participants indicated they also believed that the integrity of the traditional trades is currently being eroded in a number of ways and as a consequence of a variety of policy directions; for example, by the blurring of the boundaries between a professional trade qualification and AQF level 3. One participant expressed concern about organisations that do not decouple apprenticeships from traineeships and other level III vocational qualifications:

You know, a chemical plant operator is a tradesperson as far as [identity withheld] are concerned, because it's a certificate III level qualification. (IFG1 p.6)

In general, tradespeople do not consider the certificate III to be the same as a trade certificate. Although the blurring of boundaries may appear to be a minor issue, it is another example of how neglecting to distinguish trades from other AQF level 3 studies is fuelling the demise of a professional trade identity.

Traditionally, an apprenticeship was a process whereby an inexperienced person would work alongside an experienced tradesperson (or journeyman) for the purpose of receiving their skills and the knowledge of their craft. This process, of master teaching apprentice, has been practised for hundreds of years. In 2006, with the introduction of new Victorian legislation, the rules for training apprentices were changed to allow the employment of an apprentice in an organisation that does not also employ a qualified tradesperson of the apprentice's trade. Prior to 1998, there were statutory laws outlining the rules of 'proportion', which safeguarded the apprentice—tradesperson ratio to ensure that the apprentice learned the skills and knowledge of his or her craft under the watchful eye of a journeyman of their trade.

The Victorian Education and Training Reform Act 2006 failed to include reference to proportion, and today approval for an employer to take an apprentice 'may be given subject to [the Victorian Skills Commission] ... limiting the number of apprentices that an employer may have' (p.417, italics added). As a result of such ambiguity, having an apprentice working alongside an expert tradesperson to acquire their skills may no longer be necessary. Although the Act does state that an employer must use a person with 'appropriate qualifications, knowledge and skill' (p.416) to train an apprentice on the job, there is no clarification on what is and what is not an 'appropriate qualification', and there is concern that this door is open to interpretation. Ambiguities such as these play a role in the perception of the erosion of traditional trade vocations. As a consequence, some Australian registered training organisations are in the process of training both local and international students (many of whom have never worked in industry) with certificate III level trade skill qualifications, with the expectation of their working as qualified tradespeople in Australia. Both apprentices and nonapprentices can obtain certificate III level trade qualifications, the only difference being that 'the wording on the testamur for the apprentice graduate contains a reference that the qualification was obtained via an apprenticeship pathway' (Curriculum Maintenance Manager 2008, p.4). Given that an industry-trained apprentice is required to work for approximately four years in industry, with all the checks and balances that accompany an indenture to obtain this qualification and certificate, this small difference in wording on the testamur can appear quite tokenistic compared with the tradition of receiving stamped and wax-sealed trade papers that verify the trade and the associated professional identity, not forgetting the hours of on-the-job training and experience.

The general consensus of the focus groups was that institution-based certificate III trade programs that do not incorporate a workplace component dilute the essence and meaning of what it is to be a tradesperson in Australia.

### Trades training frameworks and trades identities

The industry representatives were supportive of the master artisan concept, if only as a means to shore up and inspire a move towards a more robust trade training framework than the version(s) currently in operation, the implication being that, without a solid framework for trade recognition and training in place, the title of master artisan is potentially meaningless.

So bumping up the integrity of a master craftsperson or whatever, it's got to sit within a framework ... to keep it at a strategic level it's got to sit within a framework, and perhaps the framework you think is there is not. (IFG1, p.5)

Industry representatives suggested nationalising the trades recognition process by giving a national body such as Trades Recognition Australia the authority to issue trade papers. This would have the potential to remove discrepancies between state qualifications, determine the minimum training requirement of a professional tradesperson, and promote a cohesive and more regulated system of trades recognition in Australia.

Introducing a master trade education and qualifications framework for tradespeople was considered by the industry focus group to be a positive move for business.

Do I think that we would be seen in a higher standing? Without a doubt ... the difficulty is going to be having a robust enough system to back it up. (IFG2 p.14)

Participants were asked to comment on the role that community perceptions of their trade had on their industry. Interestingly, representatives from the building trades believed that their trade's reputation was positive both locally and internationally; however, the engineering and manufacturing trades did not receive the same level of positive recognition. Licensing stands as a key strategy for recognition, that is:

Perception of electricians is held fairly high now [sic]. An electrician can go anywhere in the world and get a job as an electrician with an Australian licence. (IFG5 p.14)

Different trades appear to have different levels of desirability among the community.

The way I see it, the sparkies, and the builders and the plumbers have done a much better job than the engineers in terms of creating an environment and desire for young people to go into. So they see credibility and they see prestige, they don't see credibility and prestige with being a tradesman of my trade ... it's cool to be a plumber, it's cool to be a sparkie, you know, it's cool to be a brickie ... we've allowed them to take home the idea that it's dirty and it's dumb and it's dangerous. (IFG2 p.1)

Focus group participants suggested that those trades that belong to professional associations and require licensing and regulation appear also to be rewarded by greater prestige within the community.

It's no mystery that those are supported by the community because they're all the trades in the building industry and those that deal with the community in some way or another, you know, there are master locksmiths and ... electricians and plumbers. No one knows what a boilermaker does, it's a hidden occupation. (IFG1 p.5)

Discussions indicated that engineering trades such as fitting and machining, toolmaking, boilermaking, fabrication and welding and other occupations not governed by the same level of licensing, regulations and associations enjoy less prestige and vocational desirability than their building trade counterparts. In Australia, it is not imperative in most cases for people working in these metals

engineering occupations to hold trade certification, licensing or qualifications to be employed in these occupations. According to the AQF implementation handbook (2007), registered training organisations need only 'where appropriate, include the words, "achieved through Australian Apprenticeship arrangements" (AQF 2007, p.77) on the certificate testamur outlining the qualification. As noted earlier but in a more general context, it is no longer essential to hold a contract of training to receive a certificate III level trade qualification, nor to hold even basic levels of qualifications to work in many engineering trades. As a result, and also highlighted earlier, some registered training organisations are offering non-contract of training trade courses. For example, the Baxter Institute in Melbourne offers an intensive 50-week 'Certificate III in Engineering Fabrication Trade' (Baxter Institute 2011) course. The existence of certificate III contract of training (apprenticeship) courses and certificate III trade non-contract of training courses result in confusion, which has consequences for the reputation of the metals engineering trade professions in the community.

You know, they call themselves a welder when the census comes around, but almost half don't have qualifications.<sup>2</sup> (IFG1 p.9)

Unfortunately, welding occupations in Australia appear to have a 'low image ... and relative unattractiveness of the industry as a career' (Welding Technology Institute of Australia 2007, pp.26–7). The industry representatives felt that the current legislative arrangements are not sufficient to build strong qualifications and a robust structure in the skilled engineering occupations. However, international organisations such as the International Institute of Welding (IIW) have introduced strategies, levels of qualification and tiers of proficiency for welders and those who operate globally in the welding profession, and these act to differentiate those who have the required qualifications and experience from those who do not.

If you look at the IIW, what they've tried to do is come up with qualifications for supervisors certainly, and engineers, so coming down from that, you've got international welding engineer, which is a university education, international welding technologist, which is the diploma level, international welding specialist, which is the apprenticeship plus certificate IV ... and there's this thing called IWP, International Welding Practitioner ... that really has not taken off in Australia. (IFG4 p.8)

One education focus group participant (and former manager of an engineering company) was concerned about the lack of practical hands-on experience for students who have undertaken a diploma-level qualification rather than a trade. He said:

The issue in point is that they don't have the practical elements which is what industry are crying out for ... someone who comes in with a diploma of engineering doesn't excite me. Someone who has years of experience as a tradesperson, who is in an engineering space ... does excite me to employ them because having come from that background I know that there is a lot of understanding of how things are made. (EFG4 p.13)

Arguably, it is the absence of structured systems such as this, comprising qualifications, pathway progressions to higher levels of attainment and world-class standards (such as those promoted by the International Institute of Welding) that perpetuate the general undesirability of the engineering trades in Australia. The introduction of a pathway progression and tiers of attainment for tradespeople through to master level may create new destinations as well as make a trade career appear more attractive.

<sup>&</sup>lt;sup>2</sup> According to the 2006 census, there were 60 179 structural steel and welding trades workers employed in Australia (ABS 2007a), and 61% of these workers had a certificate III level qualification (ABS 2007b).

I think it is going to help the young guys come into all these trades, and have a better perception of all these trades instead of saying 'I'm only a tradie' or 'I'm just a dumb tradie', a lot of the kids think [sic]. A lot of careers advice they are getting at school these days is you got to go to uni and get a degree, 'so I don't want to be a tradie', so I think it's going to help the perceptions of the guys coming into it. (IFG3 p.15)

Although there was a general concern that current education frameworks would not provide or support the foundations necessary to create master tradespeople, all of the industry focus group representatives agreed that if it were possible, the introduction of master-level qualifications for tradespeople in Australia might play a role in improving current negative perceptions of trade occupations in the community and elevate the status of trades, which in turn might encourage more people to enter trade careers, with a concomitant impact on skill shortages in trade occupations.

Participants in the education focus group explained that the Australian Culinary Federation has introduced master-level certification for culinary experts who identify as 'a skilled artisan who has reached the pinnacle of their career' (Australian Culinary Federation 2011). To qualify for the master examination, candidates must have at least 15 years of industry experience, a trade qualification, administrative and business skills, further education, and industry and personal references, just to qualify for consideration. Once achieved, the title of master expires after five years and candidates are required to demonstrate ongoing commitment and continuous improvement to retain the title. Although this recognition is not an AQF qualification, its existence points to an industry need for an elevated platform for its experts, a mechanism for distinguishing competent tradespeople from its masters.

This example underpins the question before us: whether to formalise such programs with qualifications and make higher levels of attainment available to all tradespeople via the Australian education system.

While all participants were supportive of a master trade program in vocational and/or higher education, some expressed the view that many master craftspeople and tradespeople are not necessarily looking for a certificate on the wall to validate their mastery. This was reinforced by an anecdote from an engineering workshop.

And there was always an older person who was within the organisation, who I knew had knowledge and I knew had respect and at the end of the day you would actually go to that person, and that person could still be at the same level as you, because it wasn't about levels or qualifications, it's just that that person knew. (EFG4 p.9)

To encourage tradespeople to take up the masters, the benefits of the qualification to the tradesperson's professional development would need to be well communicated. As reported by Moodie et al. (2009), the implementation of a higher-level program could increase the prestige of vocational education and become a means of promoting the integrity of its pathways to more prestigious educational and occupational outcomes.

The research process identified two paths by which a higher education program for tradespeople could be implemented within the current educational framework:

- by utilising the AQF and constructing pathways to a level 9 (master-level) program for artisans at university
- by utilising the AQF and extending existing VET pathway programs to develop new streams that lead to a master industry practitioner level of qualification for artisans.

Arguably, both of these possibilities are potentially suitable for the master artisan program. The education focus group participants however expressed concern about tradespeople's lack of interest in existing articulation arrangements to higher education. For example:

We've developed associate degrees for tradespeople, we've developed high level qualifications but can't actually get people into them. (EFG5, p.12)

You need to look beyond a scholarly type of model because I don't think you are going to get tradespeople into bricks and mortar institutions ... people will need to maintain their trade and their passion. (EFG3, p.14)

To say go back and do something at university level [tradespeople] would freak out.

(EFG2, p.16)

The focus group participants felt that existing associate degrees do not tempt tradespeople to return to study. Associate degrees and current pathways to higher education can be viewed as leading in directions outside the profession of the master trade specialist. Although there may not necessarily be alternative employment outcomes for those tradespeople seeking higher levels of attainment, if the educational progression were more in line with the specialised trade or craft (instead of a pathway leading outside their interest), there may be far greater appeal for personal progression towards formal recognition of mastery.

#### Master artisan: course content

If a master artisan program is to be developed, course content will be of primary concern. Comments made by the educator focus group would suggest that a master trade program would potentially be more accommodating and attractive to artisans if it were implemented through an alternative education environment, whereby project-focused, work-based models could be blended with learning strategies to keep the qualifications located 'at the coal face'.

The group was presented with a list of proposed subjects for comment and consideration. The list was compiled as a result of previous discussions with industry representatives and included suggestions for curriculum content such as:

- development of industry-based projects
- research and report writing
- history of specialised skills
- management skills
- the 'black arts' (highly specialised craft knowledge)
- advanced and emerging technologies
- skills deficiencies
- mathematics (applied)
- teaching.

The curriculum would need to be considered in light of the proposed position of the master artisan program as 'equal to but different from' a higher education masters degree. Figure 1 illustrates the relative positioning of masters programs in the current AQF model.

There is potential for a master artisan or master trade program to fall within the revised AQF level 9 (master level), thereby offering a window of opportunity for outstanding tradespeople to obtain parity university qualifications at masters level.

Vocational sector (TAFE)	Higher education sector (university)	
	PhD 10	
Master artisan 9	Master 9	
Vocational graduate diploma and vocational graduate certificate 8	Graduate diploma and Bachelor honours degree 8	
Bachelor 7	Bachelor 7	
Advanced diploma 6	Associate degree 6	
Diploma 5		
Certificate 4		
Certificate 3 (apprenticeship)		
Certificate 1 & 2 (pre-apprenticeship)		

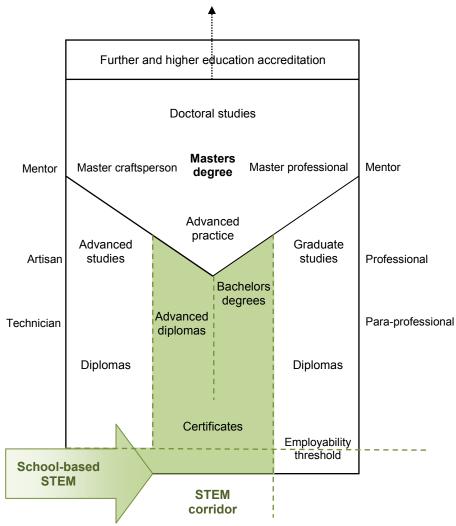
However, there are other ways of thinking about the shape of 'traditional' programs and the silo format of the current model.

Cartledge (2010), in writing about the Australian Qualifications Framework in the context of technical and vocational programs and the science, technology, engineering and mathematics (STEM) education agenda, has revised the model in line with suggestions for a more unified higher education structure, which brings together higher education and further education at the postgraduate level (see figure 2). VET opportunities are located on the left of the model and higher education on the right.

This model emerged during investigation of how to better integrate technical education and experience into models of technical tertiary education in Australia (Cartledge 2010) and confronted issues of parity of esteem similar to those encountered during this research. This is especially the case where technical and vocational courses are introduced into higher education programs.

The Apprentice—Artisan—Master profile is equally appropriate in this 'corridor' (see figure 1) and in a hybridised model gives students a position from which to access both VET and higher education. The hybrid model gives way to a more unified approach to accreditation and recognition at the higher degree (master artisan) level.





Source: Based on Cartledge (2010).

Our education focus group participants observed that many of the course subject suggestions align somewhat with the recently revised level 9 AQF descriptors for masters qualifications.

This [AQF] is currently applied to what you call a scholarly model of the current conceptions of the master's degree course for research, but in fact it's broad enough that it actually fits to some degree. (EFG1, p.14)

There are certainly key [proposals] there that fit very nicely with that level, so we've gotten pretty close to what the content should be. (EFG4, p.15)

Since we are moving into what you might call blurred territory ... and there are a lot of professional course work masters which are highly technical, aren't there, so you know, why not? (EFG 1, p.15)

There was suggestion for the master artisan qualification to have parity with a master-level qualification from a university, especially in an effort to avoid corruption of the current model. This suggestion received support from the educator focus group, as it was felt important to maintain some consistency with terminology as well as a level of parity with higher education — as 'equal but different'.

The educator focus group also raised the importance of transition education, with comments such as:

Someone who has come from a trade background may not have the learning skills to deal with what you are suggesting ... there would need to be some sort of transitional program.

(EFG2, p.15)

We recognise that ... from one level to another there is a transitional process that the participant will go through ... transitional from TAFE to higher ed is the first thing that we need to address. (EFG4, p.16)

There is a great deal of work going on in VET regarding transitions from TAFE to higher education at the undergraduate level (Milne, Glaisher & Keating 2006; Abbott-Chapman 2006). Nevertheless there would need to be a more comprehensive review of how transitions from TAFE to higher education are currently managed in professional entry graduate programs to establish the foundations of a master trade program. A completely customised suite of subjects and industry experiences would also need to be spelled out as basic elements of master artisan certification. Who would auspice the master artisan certification would also be a matter for professional and vocational associations to wrestle with.

The central limitation of existing models is the absence of an institutional education—industrial experience nexus, which is essential for the 'real world' credibility of such a concept. The tension between the technical and academic aspects of certification is well illustrated in research that investigates the para-professional qualifications of certificate IV to advanced diploma and the extent of their work-readiness (Boud & Solomon 2001; Cartledge & Watson 2008; Kamin, Cartledge & Simkin 2010).

### Discussion – identity matters

The value of identity of course is that so often with it comes purpose.

**Richard R Grant** 

The introduction of the eight-tiered Australian Qualifications Framework at the same time as new vocational education legislation in the mid-1990s helped the government to achieve its vision for a homogenised and more flexible vocational structure, but at what cost? For all the new benefits, it would seem that little consideration was attached to the importance of maintaining the professional identity and integrity of traditional trade vocations and apprenticeships, or to the reasons that generate aspirations to pursue a vocation of trades and crafts.

Gow et al. (2008) conducted a study investigating the reasons why apprentices were likely to leave their trade. It revealed that 'intrinsic motivators were more highly related to turnover than the extrinsic motivator of pay/compensation' (p.116).

Intrinsic motivation is the motivation to work primarily because the work itself is interesting and satisfying. It is generally believed that, when people can attribute their success in life to their own ability and effort, they take pride in their accomplishments. Intrinsic motivators are considered to be the aspects that provide the individual with personal (internal) rewards; for example, autonomy or achievement. There are many intrinsic motivational factors for people wanting to pursue a vocation of trades and crafts, but a significant motivator is the ability and opportunity to develop a professional identity; that is, what it is and means to be a professional tradesperson. The traditional trades such as carpentry, cabinet-making, boilermaking and toolmaking are immersed in history and tradition, and those who have come through the physical and mental rigours of an apprenticeship graduate to receive much more than a certificate. 'Since time immemorial, the artisan has been the keeper and practitioner of ancient traditions, as well as the carrier of the spirit of craftsmanship' (Knobel 2006, p.1). Skilled artisans have roots as far back as the Middle Ages. They belong to a group who 'are anchored in tangible reality, and ... take pride in their work' (Sennett 2008, p.21), producing 'meaningful' (Mills & Jacoby 2002, p.222), functional and creative works. These are the things that generate motivation. It is pride in achievement, in the real and the tactile, in the craft and the skill, and in the ability to produce works that express creativity and understanding – and to have the opportunity to be part of a group who, like themselves, appreciates tacit knowledge and a sense of the satisfaction experienced by honing one's skills through years of dedicated application (Amabile et al. 1994, p.950).

There is, or at least there should be, great pride in being a skilled tradesperson, but the reality is that on many levels, and from many different directions, tradespeople today are being denied important elements of professional identity, like trade papers, or at most, they are offered tokenistic acknowledgment for what should be very rich, rewarding and celebrated trades occupations.

Although the industry focus group participants expressed overwhelming approval of the introduction of a master artisan program, their foremost concern was that, unless the system was revitalised, a master trade program would have little or no integrity.

An additional problem has been identified which may undermine the case for the development of a program for master tradespeople: questions of what is and what it means to be a tradesperson in Australia need to be confronted and addressed. Our investigations reveal a disintegrating trade

structure with fragile foundations, considered by industry stakeholders to be unlikely to provide the integrity required to establish a meaningful master program.

If we are to build a master artisan framework, it will be important in the first instance to reaffirm trade identity. An interim solution to assist with this may be to issue trade certificates retrospectively to all graduates of traditional trade apprenticeships. This would not only go some way to addressing issues of trade identity, but also be potentially useful as an eligibility criterion for entry into a future master trade program.

Assuming that the issues identified in this project can be addressed, the researcher is of the view that establishing a high-end master trade educational program as a destination that recognises, encourages and celebrates skilled tradespeople is likely to improve the image and retention of good people in the trades – and will certainly earn praise from industry, tradespeople and apprentices. Extending the existing education pathways for tradespeople in a way that makes a genuine progression clear from the outset has the potential to reinvigorate enthusiasm for those trades that suffer as a result of being socially undervalued and perceived by young people as undesirable career options – and may even encourage and inspire young people to undertake a trade.

As we enter the second decade of the twenty-first century we can reflect on the need to improve educational pathways and access to higher-level education and qualifications for Australian tradespeople. Parity of esteem between higher education and the VET sector remains a vexed topic in the Australian context (Forward 2003; Polesel 2008). In 2008, the Bradley Review raised important questions about the necessity of enforcing such rigid sectoral divides, and initiated discussions on the possibility of breaking down silos in an effort to achieve a greater cohesiveness between sectors for the benefit of the country.

The master artisan concept exhibits great potential to revive the seeming 'dwindling away' of trades and trades uptake, with the capacity to assist tradespeople to achieve the social recognition and prestige enjoyed by other professionals in the community. Such extended VET pathways may also attract more students and more able students into trades, largely because they will see a future ahead of them that does not end with a diploma.

#### Implications

If we continue on the current trajectory, trade recognition and the reputation of professional tradespeople in Australia will further decline, with consequently fewer specialised tradespeople. This would appear especially so for trades not represented by trade associations, particularly non-licensed and non-regulated trades. This research has revealed that the implications for introducing a master-level qualification and recognition for tradespeople in Australia include the following:

- Without reinforcing trade recognition legislation and qualifications, the master artisan concept may service only a limited number of artisans who have come through a highly structured system with an identifiable persona as a tradesperson.
- If trade qualifications and issues of trade identity are not addressed, the program will be unsustainable as a result of the current 'diffusion' of trade identities.
- In the absence of a promise of professional identity, there can be no aspiration for master status.
- Without a guaranteed professional identity for trade vocations, the status of trades is unlikely to improve in the community, and industry is likely to continue to experience recruitment difficulties.

- Although the AQF provides a framework for qualifications, it lacks a suitable avenue for tradespeople who have aspirations to go further.
- There is an implicit anxiety surrounding what advanced qualifications for tradespeople would mean in terms of industrial relations issues, for example, employment categories, rates of pay and promotion requirements.

# Conclusion

This paper has revealed support for the concept of a master program for Australian tradespeople, a program which offers exceptional tradespeople the capacity to take their expertise to a higher level. What has also been revealed is a level of discontent from industry about the present erosion of trades and trade identity in Australia, as evidenced by such factors as the abolition of trade papers, the 'coupling' of apprenticeships with traineeships, and the omission of the declaration of trade vocations.

Improving the image and value of the trades is necessary if apprenticeship uptake is to be increased. Identifying and addressing the intrinsic motivating factors for trade uptake, through such measures as improving career and vocational pathways for tradespeople, would be a step in the right direction.

Establishing educational programs that recognise, encourage and celebrate the skills and knowledge of master tradespeople may also assist in improving the retention of outstanding people in the trades.

The introduction of a master trade program will mark a significant moment in Australia's industrial history, where highly skilled artisans for the first time will be able to access formal recognition, recognition that will also play a leading role in elevating the status of trades careers and conferring prestige on Australian artisans in the twenty-first century.

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### Appendix

### Table 1 Approval rating of individual qualities and attributes required by a master artisan as documented on participant worksheets

Proposed qualities and attributes of a master artisan	Industry focus group	Educator focus group	Total %
Uses high-level cognitive skills	100	100	100
Independent problem-solving capabilities	100	100	100
Demonstrates passion for his or her craft	100	100	100
Possesses highly specialised knowledge of craft skill	100	100	100
Exhibits ownership of the task	100	100	100
Concerned with aesthetics as well as functionality	100	100	100
Gains a sense of achievement from work	100	100	100
Exhibits capacity for design, creativity and innovation	100	100	100
Highly developed spatial reasoning ability	100	80	90
Craft integral to identity	100	60	80
Training/ability to pass on skills and knowledge	60	80	70
Entrepreneurial	40	100	70
Inventor	80	40	60
Passionate advocate of craft or trade	20	100	60
Exhibits qualities of genius	60	40	50
Business acumen	40	20	30
Leadership	40	0	20

Note: Highlight indicates consistency across groups.

#### Table 2 Attributes of a master artisan as revealed through focus group discussions

Educator focus group	Industry representative focus group	
Hones up their skills and is an expert in the field	Demonstrates intelligence and independent problem- solving capability	
Designs and expresses creativity Is an expert tradesperson who is happy to show examples of their work	Demonstrates passion for their craft Possesses great knowledge of trade skills	
Is always testing and exceeding their limits and breadth A tradesperson would go to for advice	Is able to exhibit great capacity for design, creativity and innovation	
Hadesperson would go to for davice Has knowledge, respect and high values s a good problem-solver and pursues perfection s strongly disciplined, highly responsible, autonomous and iccountable Thinks and explores and uses knowledge and tools to nove forward	Has highly developed spatial reasoning abilities Is an inventor and innovator Is concerned with aesthetics as well as functionality	
	Demonstrates ownership of the task Gains a sense of achievement from their work	
Loves what they do and has passion for their craft Is highly specialised and whose work resides somewhere between technical and art	Their craft is integral to their identity Demonstrates leadership, business acumen and/or entrepreneurship	
Is innovative, a bit eccentric, challenging, and can develop new techniques	Is an advocator of his or her trade May want to teach/pass on their skills	
Is learned, scholarly and can apply critical analysis of themselves and others' outputs and practice	Sits in a class over and above the base tradesperson	
May specialise in 'boutique crafts' or 'elite trades' as well		

as traditional trades

### Questions for focus groups

#### Questions for industry focus group

- According to your understanding, what is a master artisan/tradesperson?
- Based on your opinion, what skills and attributes should a master artisan/tradesperson possess?
- Look at the document with suggested qualities of a master artisan. What would you add, remove or change?
- In your opinion, would the introduction of master tradespeople into Australian business improve Australia's business standing and reputation internationally? Please explain your answer.
- Imagine that you are approaching a company door and on the door there is a plaque that reads 'Joe Bloggs Master Artisan Engineering/builder/electrician' etc. What skills, qualities, attributes and experience would you expect this person to possess?
- Would the introduction of a master trades program in Australia improve the image of trades? Why
  or why not?
- Would the introduction of a master trade program be beneficial to Australia? Why or why not?

#### Questions for education focus group

- According to your understanding, what is a master artisan/tradesperson?
- Read attached document: In your opinion, what skills and attributes should a master artisan/tradesperson possess?
- Would the introduction of a master trade program in Australia improve the image of trades? Why
  or why not?
- Would the introduction of a master trade program be beneficial to Australia? Why or why not?
- What subjects would you consider important to include in a master trade curriculum?
- From what we have discussed today, at what level do you suggest the master trade program occupy?

#### Suggested qualities of a master artisan (for focus group comment)

- Demonstrates exceptional intelligence
- Demonstrates independent problem-solving capabilities
- Demonstrates passion for his or her craft
- Possesses great knowledge of craft skills
- Exhibits great capacity for design, creativity and innovation
- Has highly developed spatial reasoning abilities
- Exhibits qualities of genius
- Is an inventor
- Concerned with aesthetics as well as functionality
- Exhibits ownership of task

- Gains a sense of achievement from work
- Craft is integral to identity
- Has the ability to pass on knowledge: teaching skills
- Has leadership ability
- Possesses business acumen: finance, budget, balance sheet, cash flow (applies to some trades but not all)
- Is a passionate advocate of their trade
- Possesses public speaking skills
- Can be entrepreneurial
- Has an in-depth understanding of technologies
- Undertakes ongoing professional development in their field



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