ENHANCING WORK-READINESS OF VOCATIONAL AND HIGHER EDUCATION GRADUATES: ASIA-PACIFIC REGION

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ABSTRACT

Challenges associated with the ‘work-readiness’ of vocational (VE) and higher education (HE) business graduates are identified by governments, industry and educational institutions across APEC (Asia-Pacific Economic Co-operation) countries as significant constraints on future economic development. It has often been assumed that the work-readiness challenge is confined to Australia, but further exploration of the issues suggests that it is prevalent in most (if not all) regional countries. For example, researchers have suggested that China has a significant problem in this regard – ‘many potential employers felt that there was “a significant gap between what they seek and what Chinese graduates trained overseas (as well as home students) possess”’ (Cooke 2010: 256). Deficiencies identified included: a serious lack of actual work experience; limited knowledge of the European and American legal and administrative systems; an inability to deal with the financial aspects of mergers and acquisitions; inadequate English fluency and overall oral skills; lack of leadership competencies, undeveloped innovative and creative capacities; and importantly, an absence of ‘lateral thought and concept synthesis’ (Nankervis et al 2012: 124). Reportedly, Indian employers are keen to employ only 25 per cent of Indian graduates due to their perceived lack of necessary training, language skills, and cultural awareness, applicant inexperience, undeveloped linguistic competencies, and poor interpersonal and leadership skills (India Skills Report 2014: Nankervis et al 2012: 135). Researchers have found evidence of similar difficulties in countries such as Singapore, Malaysia, Indonesia, Vietnam and Taiwan.

In Vietnam, Hoe (2013: 54) found that two thirds of potential Vietnamese employees lack work-ready competencies and that three quarters are currently in ‘uncertain jobs with low income’ (Hoe 2013: 54). A 2012 World Bank survey estimated that two thirds of foreign-owned enterprises had experienced lower productivity due to an absence of skilled workers, whilst another study claimed that more than eighty per cent of employees lacked work experience, or seventy per cent lacked adequate qualifications (Montague et al 2015: 24). In addition, the Ministry of Labor in Taiwan (with APEC funding), is attempting to address its work-readiness challenges by promoting mutual recognition of national skill certificates and the development of
unified competence standards (Ministry of Labor, Taiwan 2015). Consequently, the research study underpinning this paper aims to identify how to improve transitions from education to employment through a two-stage process:

1. analysing the nature of these challenges by creating an ongoing dialogue with VE/HE educational institutions, governments and industry in six APEC nations (Australia, Singapore, Vietnam, Malaysia, Taiwan and Indonesia) and

2. proposing collaborative practical frameworks/networks to address the challenges through revised educational strategies concerning industry and government programs in the Asia-Pacific region.

The six country comparative study on work readiness will be the overarching methodological approach of the research project which will be conducted over three phases. Phase 1 will involve a scoping study of policy challenges and developments across partner countries. Phase 2 will involve representative case studies across the partner countries. Phase 3 will culminate in a research workshop which will be held to analyse Phase 2 findings, and to develop, industry, national and integrated reports, along with education strategies and policies.

INTRODUCTION

This paper provides a review of the relevant scholarly and professional literature on the challenges faced by many Asia Pacific nations with respect to the levels of the work-readiness, or employability, of their labour markets, and the impacts on future economic and social development strategies. It begins with a brief overview of the demographic and socio-economic context of regional countries, followed by the presentation of several definitions of both (interchangeably-used) terms ‘employability’ and ‘work-readiness’. The paper then proceeds to a discussion of the nature and scope of the associated issues identified, before concluding with a range of potential solutions.

REGIONAL CONTEXT

It is generally acknowledged that not only are the economic structures of countries changing in response to globalisation, the influences of new technologies and new trade agreements; but also that labour markets are increasingly dynamic in response to these pressures as well as to cross-border migration, inter-generational differences, changing vocational and higher education imperatives and employer expectations (Brown et al. 2011; Bruni 2013; Galagan 2010; Jackson and Chapman 2012; OECD 2011). As Bruni (2013) suggested, ‘the pace of economic growth and the typology of development will determine the amount of labor force that will be needed and the competencies and skills that will be required’ (p. 3). Likewise an OECD report (2011) suggested that skills shortages or mismatches between the required and available skills ‘lower the potential for growth and waste resources’ (p. 7).

However, while there are commonalities in patterns of economic growth and social development across the Asia Pacific region, there are also significant differences in relation to stages of growth; industry structures; demographic profiles; labour markets; vocational and higher education systems; employer expectations, and employee conditions, including salaries, benefits, and union representation (Bruni
As examples, Australia, in common with Singapore has become primarily a service economy, with significant declines in the agricultural, manufacturing, mining and retail sectors; Vietnam maintains its robust manufacturing sector (at both low skill, and increasingly high tech levels), alongside healthy agricultural, retail and (focused) service sectors; and Malaysia aims at high technology manufacturing, but retains successful agricultural, mining, retailing and service industries, as does Indonesia; whilst Taiwan’s success depends on high technology services complemented by retailing and service sectors, and to a lesser extent, agriculture (CIA 2015; ILO 2013; OECD 2011).

With respect to country demographic profiles and associated labour markets, the populations of Australia, Singapore, Taiwan, and to a lesser extent Malaysia, are ageing significantly, whilst Vietnam and Indonesia have amongst the youngest populations and labour markets in the world (Bruni 2013; di Gropello & Kruse 2011; Galangan 2010; ILO 2014; Montague 2013). Indicators of the above include the proportion of elderly or younger people in the population (for example, Singapore comprises 27% elderly population with 17.5% young people, whilst Malaysia has 14.5% elderly and 30% young people – Bruni 2013: 16), or the median age (27.8 years in Vietnam – Montague 2013: 211). It can be inferred from the available data that the working populations of Singapore, Australia, Taiwan and Malaysia are primarily middle-aged, with significantly younger working age populations (WAP) in Vietnam and Indonesia. WAP statistics reveal 74% in Singapore, 61% in Malaysia (Bruni 2013: 16); and 70% in Vietnam (Montague 2013: 211). However, whilst countries such as Australia, Singapore, Malaysia and Taiwan are experiencing significant skills shortages due to their ageing workforces, in Vietnam and Indonesia there is ‘an over-supply of available labour but an under-supply of qualified and skilled employees’ (Montague 2013: 209). All countries studied are experiencing difficulties in attracting and retaining employees with the required portfolio of qualifications, vocational skills and personal capabilities (Galangan 2010; ILO 2013, 2014; Manpower 2015; OECD 2011). As Bruni (2013) explained, these labour market deficiencies which constitute the ‘knowledge structure’ of these economies are primarily ‘the result of past formal learning processes inside the education and vocational training systems and of the training on the job provided by the production structure’ (p. 38). Their effects include constraints on national economic growth, future production structures and long-term socio-economic development, or as Galangan (2010) expressed it, at the institutional level:

“A significant gap between an organisation’s current capabilities and the skills it needs to achieve its goals...is the point at which an organisation can no longer grow or remain competitive because it cannot fill critical jobs with employees who have the right knowledge, skills and abilities” (p. 45).

It is pertinent here to note that the reported skills gaps refer both to the quantum and the quality of the labour markets in these Asia Pacific economies, the latter – ‘work-readiness’ or ‘employability’ - being the key focus of this collaborative research project.

Definitions and the nature of ‘work-readiness’ and ‘employability’ challenges
According to Connell and Burgess (2006), ‘employability – not employment – is said to be the new workplace reality, whereby many of the generation Y population…will not expect full time jobs with career ladders’ (p. 498). This view represents the perspectives and expectations of many generation Y school-leavers, vocational and higher education graduates who, it is reported, are reluctant or unwilling to commit themselves to long-term employment or traditional career patterns due to their desire for fulfilling jobs and adequate work-life balance. However, it presents only one side of the coin with respect to work-readiness or employability. Many employers in Asia Pacific countries have been reported as being critical of the actual knowledge, skills, work experience and/or personal qualities of applicants for both basic and higher level occupations.

A recent Manpower report (2015) suggested that thirty eight per cent of employers in the region expressed their inability to fill key positions due to either the quantity or quality of applicants, notably in relation to skilled trades, sales representatives, engineers, technicians, accountants, information technology workers and managerial categories. The report also asserted that, whilst a third of employers experienced difficulties due to a lack of applicants, the remainder complained of either deficient technical skills, a lack of work experience and/or undeveloped workplace competencies. Associated studies in China, India and Vietnam found similar, if not greater, skills gaps in most of the same occupations and industry sectors (Galagan 2010; Montague 2013; Nankervis, Cooke, Chatterjee & Warner 2012). Brown et al. (2011) argued that ‘only 13% of university graduates from the twenty eight low-wage Asian nations were suitable for jobs’, whilst Galagan’s (2010: 47) study revealed that the most affected industries in the Asia Pacific region were the education and health, leisure and hospitality, trade, transportation, banking and finance, professional and business services, and government sectors.

Drawing on this and other associated research, several definitions of the concepts of work-readiness and employability have emerged. Mason et al. (2006) described work-readiness as the ‘possession of the skills, knowledge, attitudes and commercial understanding that will enable new graduates to make productive contributions to organisational objectives soon after commencing employment’ (p. 2). The OECD’s definition is simpler but more direct – namely, ‘the right skills mix not only for the present but also for the future needs of dynamic labour markets’ (OECD 2011: 11). Connell and Burgess (2006: 498) added the components of employee ‘capacities’ and ‘willingness to be proactive in a diversity of jobs’. Finally, the Australian Qualifications Framework (AQF) defines the non-technical skills required of effective work-ready graduates, whether from vocational or higher education, as:

“transferable, non-discipline specific skills a graduate may achieve through learning that have application in study, work and life contexts. The four broad categories in the AQF are: fundamental skills; people skills; thinking skills and personal skills” (AQF 2015).

While it is generally acknowledged that many job applicants throughout the Asia Pacific region appear to lack work-readiness skills or aptitudes, the specific deficiencies require some exploration. Montague (2013) categorised them into two types – namely, vocational skills and ‘capabilities’, where vocational skills refer to formal qualifications at both vocational or higher education levels, and capabilities represent so-called ‘soft’ skills. Other authors have divided work-readiness into four
competencies – namely, ‘key’, ‘core’, ‘transferable’ and ‘generic’ - where the latter
two are considered to be amongst the most deficient in many applicants (Mason et
al. 2006: 2). Importantly, there is some evidence that graduates from secondary,
vocational and higher education institutions do not always possess the required
vocational skills and/or capabilities:

‘almost one third of secondary education graduates are considered to be below
average or very poor, and most of the rest are just fair. Although tertiary education
graduates have a somewhat better reputation, the majority are considered only fair,
and just a very small proportion are rated very good’ (di Gropello et al. 2011: 21).

Others have observed a different perspective concerning the contribution of
educational institutions to work-readiness, especially evident in the Asia Pacific
region – the ‘education “explosion” in the supply of college-educated workers…(is) a
problem because widening access to a college education lowers the value of
credentials in the competition for jobs’ (Brown et al. 2011: 7) – not to mention the
frequently-cited deficiencies in both vocational and higher education standards due
to the commercialisation of education, the emphases on theory at the expense of
professional practice (including the removal of work-integrated learning, student
placements or internships), the replacement of experienced teachers with doctorate-
qualified researchers, the quality of teaching facilities, the currency of curricula, and
pressures to streamline courses and provide more facile assessment systems. One
study of the Indonesian education system, for example, found that secondary
education often suffers from poor teaching-learning quality, inadequate teaching
facilities and unresponsive curricula; whilst tertiary education failed to provide
students with appropriate practical skills, capacities for adaptability and innovation,
and effective links to industry; but informal training providers tended to be
‘reasonably responsible to labour market needs' (OECD 2011: 22-25). Similar
criticisms have been made about the Australian, Malaysian, Vietnamese, Chinese
and Indian education systems (Nankervis et al. 2012). Accordingly, some
researchers have suggested that ‘a supply push is required to increase the
relevance of secondary and tertiary education to the needs of (industry)' (OECD
2011: 18).

Together with the failure of some regional education systems to provide industry with
the requisite professional and technical skills and thus enhance their immediate
productivity, perhaps the most cited work-readiness challenges are in the area of
applicant ‘capabilities’ relating to secondary, vocational and higher education
graduates. Numerous researchers have attempted to identify the particular
components of these work-readiness skills components, for which there is broad
agreement about the constituent elements of these skills. It is also generally agreed
that national governments, educational systems and employers (separately and
together) share the responsibility for nurturing and developing them. Thus, Mason et
al. (2006) suggested that numeracy, literacy, information technology, general
communication, problem-solving and teamwork; together with ‘learning how to learn’
and ‘understanding the world of work’ were key competencies for all new job
applicants (p. 3). Di Gropello et al. (2011) elaborated these skills further, with special
reference to the services and export-oriented sectors in Indonesia – job-specific
skills plus behavioural skills (communication and leadership), client orientation,
teamwork, innovation, information technology and managerial competencies
(services); thinking, negotiation, IT and language skills (export-oriented sectors); plus
creativity, critical thinking, communication technological skills, proactivity, curiosity and effective understanding of company and industry operations (pp. 6-10).

An OECD report (2011) categorised such skills as basic foundation skills (literacy and numeracy), higher level cognitive capabilities (problem-solving and analytical), interpersonal skills (communication), teamwork and negotiation, technological flexibility, learning skills, creativity and entrepreneurship (pp. 14-15). Connell and Burgess (2006: 499) emphasised the importance of ‘portable’ and ‘transferable’ competencies, allowing employees to smoothly move within or between industry sectors. However, the most comprehensive taxonomy of the ‘soft’ or ‘non-technical’ competencies required by but often lacking in job applicants across the Asia Pacific region is provided by Jackson and Chapman (2012: 548-551). Following an extensive study of undergraduate business programs in universities in Australia and the United Kingdom, they compiled a thorough listing of graduate competencies required ‘to successfully and innovatively apply disciplinary knowledge in the workplace’ (p. 541), which has implications for government policy, higher education service providers and employers alike.

Jackson and Chapman’s (2012) extensive competencies list includes such key capabilities as business principles, core business skills, critical thinking (pattern recognition, conceptualisation, evaluation), problem-solving (analytical, convergent reasoning), decision-management (diagnosis, lateral thinking, information management), political skills (influencing others, conflict-resolution), working with others (task collaboration, teamwork, social intelligence, diversity management), oral and formal communication (verbal, giving and receiving feedback), personal ethics, confidence, self-awareness (meta-cognition, lifelong learning), self-discipline (self-regulation, stress tolerance, work-life balance), innovation (entrepreneurship, change-management), leadership, performance management, organisational management, environmental awareness, professional responsibility and a strong work ethic (pp. 548-551). It would be unreasonable to expect all of these outcomes from the education system (whether secondary, vocational or higher) alone, and thus stakeholders such as governments, education systems, industries and employers, the potential employees themselves and their families are all implicated in the policy and practice mix.

The next section of this paper reviews the relevant literature on how these stakeholders might effectively address the serious work-readiness challenges in the Asia Pacific region in order to contribute to enhanced productivity, competitiveness, effectiveness and efficiency for the economy and individual employers, on the one hand; and greater satisfaction, fulfilment and career opportunities for prospective employees, on the other.

**STRATEGIES & STAKEHOLDER RESPONSIBILITIES IN ENHANCING JOB APPLICANT WORK-READINESS**

As discussed previously, a range of stakeholders are responsible for the effective short- and longer-term management of the identified mismatches between potential employees’ skills and capabilities and employers’ changing and dynamic requirements. National governments are responsible for the design, funding, regulation and evaluation of appropriate economic, social and human capital
development strategies and policies; educational systems and their institutions are charged with the effective implementation of such strategies and policies; industries and their associated organisations have imperatives to attract and retain qualified and skilled employees; and prospective employees and their families have a key responsibility for facilitating the development of the necessary competencies and capabilities. As Connell and Burgess (2006) pointed out, there are only 'six possible sources of funding for skills acquisition – the family, individuals, the firm, the industry, the community and the state – (and) the allocation of funds toward skill development depends on the transferability, recognition, application and returns from time and money invested' (p. 498).

With respect to governmental imperatives, Bruni (2013) cited a joint statement from the 17th ASEAN Summit, held in Hanoi in 2010 – 'human resource development should be an integral part of a country’s development strategy…HRD correlates with productivity and higher productivity leads to higher economic growth' (p. 9). She argued that such government human capital development strategies and associated policies should contain both short-term objectives - 'a correct response to the local labour demand in terms of skills' – and long-term goals – 'to endow the incoming generation with the knowledge and skills necessary to move the national production structure towards high quality products' (p. 46). A subsequent ILO report (2014) outlined the key priorities of such government strategies, including employment creation, labour productivity, investments in school-training-work programs and wages growth, policies which support industry structural change and quality employment, and improve workplace gender equality (p. 4). Under this umbrella, government policies are required which encourage industry to improve its skill utilisation; disseminate information and advice which assist the matching of skills; formulate national skills assessments and qualifications frameworks; provide flexible recognition of prior learning (RPL) opportunities; and influence the demand for higher-level skills (OECD 2011: 20-23). Remedial approaches such as improving skills measurement techniques; addressing unsatisfactory quality indicators in secondary, vocational and higher education systems; establishing multiple pathways for skills development; developing specialised approaches to youth skills acquisition; and dealing with labour market constraints to skill-matching, are also recommended (OECD 2011: 30-34).

Those designing and implementing education systems, at all levels, also need to be more aware of and responsive to industry labour demands; to consequently establish closer and more collaborative ongoing institutional linkages; to adapt to the dynamism of local, regional and global labour markets; and consequently to provide education and training programs which better reflect new social, economic and technological contexts. Several observers have discussed the applications of these imperatives for vocational and higher education in particular. These include, but are not restricted to, curricula which is more balanced between theory and praxis, financial incentives to encourage and support institutional links between educational and industrial institutions, greater research on graduate destinations, enhancing skills training for innovation and strengthening the nexus between certificate-diploma-degree programs (Galagan 2010: 46; ILO 2014: OECD 2011). Specifically, some authors have proposed that course content will need to be revised, that new programs and pedagogies should be implemented, and in particular, that there might be greater opportunities for applied work experience within existing technical and professional courses (Galagan 2010; ILO 2013, 2014; Mason et al. 2006; OECD
Moreover, Bruni (2013:24) contends that structured and embedded pathways between education institutions and employers are integral as ‘structured work experience has clear positive effects on the ability of graduates, firstly to find employment within six months of graduation, and secondly to secure employment in graduate-level jobs’.

With respect to employers, who ‘tend to provide short-term remedial skill development rather than long-term development’ (OECD 2011: 27), future imperatives might include such new initiatives as closer liaison with government education departments, secondary and vocational/higher education institutions with respect to curriculum design and the use of new pedagogical technologies; structured work experience programs, including Work-Integrated Learning (WIL) and Recognition of Prior Learning (RPL); course funding opportunities, ongoing graduate development schemes, and enhanced on-the-job and (paid) off-the-job training systems, including ‘corporate university’ structures where feasible. As the OECD (2011) report argued, there are significant benefits for employers who are prepared to invest in human capital development initiatives such as innovative funding strategies for firm-based training, and/or to provide greater incentives for their employees to undertake external training on their own initiative. In the case of private training providers, it is suggested that they might set up school-work transition programs, work to improve the input quality of school-based vocational training, and participate in the development of revised skill competence and quality frameworks (ILO 2014).

METHODOLOGY

A six country comparative study on work readiness will be the overarching methodological approach of the research project taking place over three phases. Phase 1 will involve a scoping study of policy challenges and developments across partner countries. This phase will comprise an analysis of existing research and policy documents. Each participating country will be responsible for developing a report according to a pre-determined framework. This phase will lead to a consultation and planning workshop in order to develop Phase 2. Phase 2 will involve the production of representative case studies across the partner countries. The research protocol will incorporate documentary analysis, interviews and focus group data collection. Specific sectors and occupations will be targeted to assist comparability. Each institution is responsible for researching their national case studies. A pro forma for the conduct and reporting of the research has been developed to ensure consistency of the existing data. Phase 3 will culminate in a research workshop which will be held to analyse Phase 2 findings; develop industry, national and integrated reports and propose education policy and practices to resolve challenges and promote approaches that support work readiness. Figure 1 provides a visual depiction of the three phase study.
CONCLUSION

This paper has reviewed a range of relevant scholarly, professional, government, industry and media literature on the nature, causes and effects of the reported mismatches between business applicants skills and employer requirements globally and in particular in the Asia Pacific region. It outlines the challenges faced (primarily) by governments, industry and educational institutions; and highlights some of the possible ways in which they might practically address them in order to increase national productivity and competitiveness, improve industry effectiveness and profitability, revise vocational and higher education systems to enhance the work-readiness or employability of potential applicants, and finally to provide more attractive and satisfying jobs and workplaces for present and future employees within the Asia Pacific region. The paper presents the intended research which will commence in late 2015 culminating in April/May 2017.

ACKNOWLEDGEMENTS

We would like to acknowledge Curtin Business School (CBS) and the CBS Asia Business Centre for funding this research project.

REFERENCES


