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29 August 2008

Mr John Carter
Committee Secretary
Senate Education, Employment and Workplace Relations Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

By email: eewr.sen@aph.gov.au

Dear Mr Carter

Subject: Inquiry into the effects of climate change on training and employment needs

As Australia's pre-eminent professional association, representing the diverse interests of more than 117,000 finance, accounting and business advisers, we are committed to working with governments and their agencies to ensure current and future economic and social policies foster an environment that facilitates sustainable economic growth.

We would like to thank the Committee for conducting an inquiry into the important issue of the training and employment needs emerging out of climate change.

Accountants, as the managers of the economic resources of business will play a key role in advising business on how to respond to climate change. We envisage that because of this key role, demand for accountants will increase. Such an increase in demand will be at a time when the profession is already experiencing significant shortages.

For the profession to be able to fully meet the current and future needs of business emerging from climate change, not only is it important for current accountants to be informed and educated on the potential impacts on business of climate change, but also that the supply of accountants be increased through federal funding of additional domestic accounting places at universities.

Accountants have the fundamental skills necessary to be able to advise business on the implications of climate change yet there is significant lack of awareness of these implications. The training needs of accountants then in this regard are expected to be mainly based on awareness of climate change policy and the business implications emerging from both the consumer and policy responses to climate change.

If you have any questions regarding this submission, please contact Gavan Ord on (03) 9606 9695, or via email at gavan.ord@cpaaustralia.com.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Paul Drum', written in a cursive style.

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Inquiry into the Effects of Climate Change on Training and Employment Needs

The ability of universities and other research and training institutions to meet current and future demand for climate change professionals

Introduction

According to the Minister for Climate Change, Senator, The Hon. Penny Wong in a speech on 6 June 2008:

“Let me be absolutely clear: the Government believes that climate change is an economic issue, and the only way to tackle climate change is with real economic reform.

How Australia responds to the threat of climate change is a crucial test of economic management.”

It is therefore fundamental that the skills of professionals working in business, including accountants are used and where necessary enhanced in order for business to effectively respond to the policy and consumer responses to climate change.

Professionals, such as accountants, engineers and scientists will play the key roles in assisting the business respond to climate change. In this submission, we are restricting our comments to the accounting profession.

We believe that accountants already possess the fundamental skills needed to assist business respond to the implications arising from climate change policy. To assist business respond to the implications arising from climate change, accountants as they have done in response to many other legislative changes, will apply their existing skills and experiences to the new context and provide the information and advice necessary for business to respond effectively.

The business implications of climate change and the broader issue of sustainability will mean that accountants from nearly all disciplines will play a fundamental role in the business response to climate change. The implications for the accounting profession is an increase in the demand for accountants to help business to be able to respond.

Shortage of accountants

This increase in demand for accountants is at a time where various independent research shows the profession is suffering key shortages (see research undertaken on behalf of the former Department of Employment and Workplace Relations (DEWR) titled ‘Skills in Demand Assessment Report’ and published in November 2006 and the Migration Occupation in Demand List, as compiled by the Department of Education, Employment and Workplace Relations). The ageing of the profession will further exacerbate problems in the short to medium-term. Opportunities therefore exist to engage and train mature-age accountants to assist with this increase in demand.

Another important method of managing this shortage is to increase the supply of accountants from universities. In relation to the ability of universities to be able to increase this supply, we refer the Committee to the Joint Accounting Bodies submission to Professor Bradley’s Review of Australian Higher Education (see Attachment A). The key recommendation from the submission is that to assist the accounting profession meet current and future demands placed on it, federal funding for domestic accounting places be increased via tied funding to business faculties. Such an increase in funding of domestic accounting places will help to ensure that universities can continue to play a pivotal role in the supply of accountants and as part of that, an essential role in providing professionals that will assist business respond to climate change.

To ensure that future accountants have an understanding of the business implications of climate change, we believe that it is important for future accountants to be exposed to the implications arising out of climate change in various subjects within their accounting degree. This would allow aspiring accountants to have an understanding of how the knowledge they acquire in their qualification can assist them to help business respond to climate change.

Recommendation:

To increase the ability of universities to meet the current and future demands arising from climate change, federal funding for domestic accounting places at universities be increased via tied funding to business faculties.

Why do accountants have a fundamental role in assisting business respond to the climate change?

Accountants are fundamental in providing advice to business on the efficient allocation and management of resources and to the operation of financial and capital markets, and through these to the production of goods and services. Accountants are therefore critical to decision making, particularly in relation to where and what assets or projects to invest in, risk management and the compilation and verification of information, including non-financial information. As the business issues surrounding climate change and the government policy responses to climate change take greater prominence, accountants will be among the key professionals from whom businesses will seek advice.

In consultation with members, we have compiled a list of business implications of climate change and the potential role of accountants in response to those implications (see Attachment B). It is clear from this list, that accountants already have many of the fundamental skills required to assist business respond to the issues emerging from climate change. However, there is still a significant gap in the knowledge of climate change issues amongst members. As an important provider of training and information to accountants and others in the business community, CPA Australia is currently considering how best to address this gap.

Given the key role accountants will play in advising business on the implications of climate change and the need to generally improve the knowledge of accountants in this area, we believe the Government can play an important role in assisting the profession bridge this knowledge gap. We therefore suggest that the Government consider extending the Climate Change Adaptation Skills for Professionals Programme, administered by the Department of Climate Change, to accountants.

Recommendation:

The Government extend the Climate Change Adaptation Skills for Professionals Programme to accountants.

Measures to assist understanding of climate change in the Asia-Pacific region, including provision of training and skills assistance

Australia's significant experience and excellent reputation in training and developing accountants can be used to assist the Asia-Pacific region better understand and respond to climate change issues. Specifically, the central feature of the Kyoto Protocol is its requirement that countries limit or reduce their greenhouse gas emissions. By setting such targets, emission reductions take on an economic value. To help countries meet their emission targets, and to encourage the private sector and developing countries to contribute to emission reduction efforts, negotiators of the Protocol included three market-based mechanisms – Emissions Trading, the Clean Development Mechanism and Joint Implementation.

Clean Development Mechanism

The CDM allows emission-reduction (or emission removal) projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO₂. These CERs can be traded, and used by industrialised countries to meet a part of their emission reduction targets under the Kyoto Protocol. China and India have the largest number of registered CDM projects by far. It is estimated that the CDM projects will reduce greenhouse gas emissions by approximately 220 million tonnes annually and generate income and sustainability expertise for developing countries.

The CDM projects must qualify through a rigorous and public registration and issuance process designed to ensure real, measurable and verifiable emission reductions that are additional to what would have occurred without the project. The mechanism is overseen by the CDM Executive Board, established under the United Nations Framework Convention on Climate Change (UNFCCC).

Issues with the CDM

While there are concerns about the complexity of the process to get an application for a project to be approved and the timeliness of such approval, of significant concern amongst participants in the CDM process is the shortage of Designated Operational Entities (DOE) or auditors and concerns about the skills of those auditors. Given that developing countries in the Asia-Pacific region are by far the biggest source of CDM projects, the shortage of DOEs and concerns about skills within those DOEs is considered by many commentators to be a major inhibitor of growth of CDM projects.

Australia with its education expertise can play a role in providing training in the Asia-Pacific that would help increase the supply and quality of DOEs. With more DOEs on the ground in the Asia Pacific (whether they be in Australia or elsewhere), it could help to bring CDM projects to fruition quicker and hence encourage further growth of CDMs and the benefits that flow from such projects.

While much of the training and skills required to become a DOE are in the engineering and scientific fields, there is also a need for aspiring DOEs to have the policies and procedures to manage audits to ensure integrity and robustness to have financial skills in order to validate whether potential projects meet the "additionally" test. To meet the additionally test, the project proposer must undertake investment analysis to determine whether the proposed project activity is not:

- the most economically or financially attractive; or
- economically or financially feasible, without the revenue from the sale of the permits (certified emission reductions) that arise from such a project.

To be able to prove one of these requirements requires the use of sophisticated financial analysis using methods such as Internal Rate of Return, net present value, cost benefit ratio etc. To be able to validate such financial data, the DOE may be required to undertake a thorough assessment of the financial statements of the project developer, including Weighted Average Cost of Capital. It is therefore important that DOEs have the financial skills to be able to properly validate a project proposal.

It is also important the DOEs are trained in appropriate quality assurance procedures for audit and for minimising the risk of a conflict of independence emerging.

Australia does have extensive experience and an excellent reputation in training and skilling accountants and auditors in the financial area. Australia also has considerable experience in developing and applying quality assurance procedures for auditors of financial and non-financial information and for training in ethics. The quality assurance procedures and ethical requirements developed for auditors in Australia, could be quite easily replicated for aspiring DOEs in the Region.

Recommendation:

The Australian Government should, in conjunction with Australian training providers in the engineering, scientific and accounting areas, provide training and transfer of knowledge in the Asia-Pacific that would give more businesses the skills and procedures they need to register as Designated Operational Entities and to improve the skills of existing DOEs.

ATTACHMENT A

29 July 2008

Secretariat
Review of Australian Higher Education
GPO Box 9880
Canberra ACT 2601

Dear Professor Bradley

Re Review of Australian Higher Education

The Joint Accounting Bodies (JAB) comprising CPA Australia, National Institute of Accountants and the Institute of Chartered Accountants in Australia welcome this opportunity to provide input into the review of Higher Education in Australia.

The Higher Education sector plays a vital role in the creation and dissemination of knowledge; a purpose all the more critical given the rapid internationalisation of economies and the increased pressure of global competition on Australian business.

In constructing our response, the JAB has kept its focus on business education and its role in preparing graduates for the demands of the workplace and laying the foundation of the values and ethics expected by the professional accounting bodies and by the community we serve.

The accounting profession is distinguished by its degree-qualified members who have also undertaken additional postgraduate admission education. Accounting education, at both undergraduate and postgraduate level, is governed by the International Federation of Accountants' Education Standards Board. Australia is represented on this Board and by this representation our respective admission education programs are benchmarked against an international standard.

This recognition of the quality of our professional accountants' expertise is evidenced by the high number of Australian accountants drawn to work in the world's major capital markets. And while our members seek opportunities around the world, many overseas accountants come to Australia in response to the acute shortage of qualified accountants and are absorbed into the profession.

This global focus by the accounting profession supported Australia's early implementation of International Financial Reporting Standards (IFRS) and adds to Australia's reputation as a safe and open business environment.

It is from this position of strength in education, professional standards and international experience that this response aims to make a concrete and practical contribution to the debate while respecting the autonomy of Higher Education institutions and acknowledging their unique contribution to the future skilling of Australia.
Yours sincerely



Geoff Rankin
Chief Executive Officer
CPA Australia



Graham Meyer
Chief Executive Officer
The Institute of Chartered
Accountants in Australia



Roger Cotton
Chief Executive Officer
National Institute of Accountants

Submission

Higher Education in modern Australia

1. How adequate is the statement of functions and characteristics of Higher Education in modern Australia?

The Joint Accounting Bodies (JAB) supports the core **functions** of teaching and research in Higher Education and acknowledges that it provides a central contribution to the Australian economy and society. Higher Education is uniquely placed to generate new knowledge through its research endeavours and, by extension, make a vital contribution to innovation. It has an equal role to disseminate knowledge via teaching the future workforce of Australia as well as building the knowledge capability of developing nations through international activities.

However, the range of functions as outlined in the Discussion Paper beyond the core teaching and research areas, are ambitious. If they are considered core they should be adequately funded and explicitly acknowledged. In determining the range of functions and providing resources, there is a need to set objectives and include mechanisms for measuring the return on investment. The JAB supports the **characteristics** as defined, without allocating any priority.

The JAB recommends: increased federal funding for domestic accounting places at universities via tied funding to business faculties recognising accounting as a key shortage discipline.

As a primarily degree educated profession, accounting has a heavy reliance on Higher Education for educated graduates. Additional investment in Higher Education needs to be committed to ensure universities can continue to play a pivotal role in the supply of accountants.

Research from a number of sources, including the federal government, shows that the number of domestic undergraduates studying accounting has remained virtually unchanged in the last 10 years. This is in spite of increased demand for accounting graduates to the point where there is an acute skill shortage in the accounting profession.

The JAB recommends: increase the capacity of Higher Education for curriculum renewal to better reflect the contemporary demands of business in a rapidly changing globally competitive world. Reflections from JAB members and the business sector more widely suggests a knowledge and skill gap between new graduates and the expectations of employers. Even those employers who regard graduates' technical knowledge as adequate find the generic employability skills of graduates wanting.

Business faculties should be given the resources to provide a learning experience which takes a whole-of-business view of accounting education, placing emphasis on career-sustainable learning including the development of generic skills, to support life-long and career-wide transitions.

Recent research by the Australian Business Deans Council Teaching and Learning Network (ABDC T&L) supports the need for the development of 'soft' or generic graduate attributes with particular focus on improving communication skills, ability to adapt to change, problem solving and teamwork.

These skills need to be embedded in an intentional curriculum design of constructed learning experiences not an "accidental" outcome of conventional teaching processes. With the ever growing body of technical accounting knowledge the challenge is to select core building blocks of this knowledge rather than continue to expand the number and content of technical accounting subjects.

Meeting labour market and industry needs

2. Are there impediments to the Higher Education sector being able to innovate in the development of courses and programs? What are these impediments and how could they be removed?

The JAB has two sources of information to draw on in responding to this question. First is our close understanding of the needs of the accounting professionals that we represent. Second is our involvement with Higher Education both at individual institution level and as sponsors of the peak body for accounting and finance academics (AFAANZ).

From these sources we are aware that impediments exist to innovation and development of curriculum in Higher Education.

Impediments that we are aware of include the lack of dedicated time afforded to academics for the development of curriculum. The JAB is of the view that Higher Education needs to have greater engagement with business and industry needs and we have an acknowledged role to play in this. Factors further impeding curriculum innovation are the demands presented by the rapid change in student composition. A 300 fold increase in full fee paying international students in the last decade has led to a significant increase in overall student numbers particularly in business faculties; and a resultant increase in casual teaching staff. In addition, with class sizes on average above an acceptable level, we are aware of the impact this has on the quality of the learning outcomes and therefore graduates competency development. The speed of change in Information and Communication Technology (ICT) also presents a challenge to academics to ensure curriculum is delivered using up to date technology and modes.

Together, these factors impede innovation. The academic teaching workforce is under pressure to deliver courses to a greater number and more diverse student base, but with less time and resources available to develop new and an innovative curriculum. This is of concern not only to the accounting profession and the businesses we serve but it also risks falling short of community expectations of graduates from Higher Education.

These impediments are well understood by Higher Education and attempts are being made to address them within the limits of individual institutions. Given the importance of innovation in courses and programs, more support and appropriate resources are needed.

Curriculum content needs to be more flexible with the ability to respond to the needs and requirements of industry. There needs to be a distinction drawn between innovation for its own sake and innovation that reflects the needs of the business sector. In accounting education, where standards are paramount, consideration should be given to a curriculum structure that allows the development of depth in core competency areas yet offers breadth in generic competency development and contemporary issues. There are individual institutions that provide examples of best practice in this area.

The accounting bodies' joint accreditation of accounting degree programs has, as part of the course structure, recommended a balance between core accounting knowledge and generic skill development. This is endorsed by the requirements of international accounting education standards requiring greater breadth in accounting degrees. In the joint accounting accreditation guidelines we recommend that up to 25 percent of subjects in undergraduate degrees should be undertaken in areas other than accounting. However, academics tell us, and our own admission process shows, that few students take up this opportunity.

3. What are the appropriate mechanisms at the national and local level for ensuring Higher Education meets national and local needs for high level skills? What is the role of state and territory governments in this area?

The JAB is aware of a recent initiative to develop National Protocols for private institutions (non self-regulated) providers of Higher Education. This initiative is being driven by the Joint Committee of Higher Education's inquiry titled "The Desirability of a National Higher Education Accreditation Body". This is a move to harmonise State and Territory systems of accreditation and quality control which currently differ markedly in each separate jurisdiction causing unnecessary effort and duplication. This initiative however does not address whether the courses offered by these private providers meet national and or local needs.

A similar move to develop a national protocol to integrate and clarify the roles of Federal, State and Territory governments for self-accredited Higher Education institutions should be considered. The JAB makes a recommendation about how this could be achieved in its answer to question 35.

4. How adequate are the mechanisms for aligning supply and demand of graduates? How do pricing and labour market signals impact on student choices?

As outlined in the discussion paper, when students choose a course of study to pursue, pricing and labour market signals are not the primary drivers of that choice. Of the mechanisms currently in place for aligning supply and demand, the inflated entry scores needed to study accounting, particularly in larger city-based institutions, is one mechanism which artificially limits supply.

As organisations representing the accounting profession, we have a responsibility to promote the profession to attract the best students in sufficient numbers to satisfy the demands of business. We also actively lobby and inform government about the levels of supply and demand operating within our sector and the likely future impact on the sustainability of the profession.

In our role as government gazetted assessing bodies for immigration purposes we assess the accounting qualifications of potential migrants seeking to work in the profession in Australia and in that way contribute to alleviating the skills shortage in the profession.

Given the acute and chronic shortage of trained accountants, Higher Education needs to ensure a continued supply of quality accounting graduates into the profession. To do this Higher Education needs to offer a variety of pathways to completion as well as the flexibility to enable mobility of students during their studies.

As stated earlier, given the shortage of qualified accountants, we are particularly well placed to note the current imbalance of demand and supply in producing sufficient domestic graduates for the accounting profession. Higher Education, its course structures, access and entry level scores need to reflect the demographic reality and seek more ways to encourage participation.

5. Are there particular examples of good practice where you can demonstrate either rapid response to skill shortages or successful initiatives to improve generic skills?

First in response to the skill shortage, the accounting profession has implemented a number of initiatives to alleviate the shortage. At individual firm and business level, accounting employers offer more flexible working environments to encourage greater levels of participation particularly for older employees and those returning after career breaks. Employers are also re-inventing their workplaces to increase the appeal to Generation Y by offering a varied and challenging career with the opportunity for travel. In this way each body has had steady increases year on year of new enrolments in our respective professional qualifying programs.

The introduction of the 485 visa by the previous government's Department of Immigration and Citizenship addresses the shortage of accountants by offering international graduates who seek permanent residence, an 18-month visa to gain the necessary skills to qualify for residency. The three accounting bodies have over the last year committed significant resources to jointly develop the Skilled Migration Internship Program – Accounting (SMIPA) for international graduates on 485 visas. This program will be offered by approved providers who meet the eligibility criteria outlined by the accounting bodies.

The 485 visa makes international graduates who previously had poor employment outcomes in the accounting profession more accessible to employers and the new SMIPA program, with an equal emphasis on the development of generic business skills and work experience, aims to make international accounting graduates work ready with essential employability skills.

In response to the question of generic skills, the professional accounting bodies, have highlighted the increasing trend whereby a percentage of accounting graduates do not demonstrate an appropriate level of generic skills. By generic skills we refer to the International Education Standards (*IES 3 – Professional Skills*).

In addressing this problem we again refer the Review Panel to the work of the Australian Business Deans Council Teaching and Learning Network (ABDC T&L). This body has undertaken research into accounting degree programs in Higher Education. The most recent research report published in March this year is an excellent review of the current situation as regards to the need for greater focus on the development of generic skills in business education. The report is titled "Business as Usual: a collaborative and inclusive investigation of existing resources, strengths, gaps and challenges to be addressed for sustainability in learning and teaching in Australian university business faculties".

The ABDC T&L have again sought the participation of the accounting profession in its current research "Accounting for the Future". To quote its stated aims it "seeks to investigate curriculum concerns with professional accounting programs offered by Australian universities" and "the growing breadth of generic skills which will be required of students who will graduate from university professional accounting programs over the next ten years".

As stated above we fully endorse this important work and support the need to resource any recommendations that will see the integration and development of generic skills in accounting degree programs.

6. How effectively are Australian Higher Education institutions responding to demographic change, especially in providing lifelong learning to meet the challenge of the ageing population and the need for upgrading of skills and re-training?

The accounting profession has experienced an explosion in knowledge in the last decade. For this reason, lifelong learning and continuing professional development has been an ongoing focus of the JAB and is a requirement under the International Education Standards (*IES 7 – Continuing Professional Development: A Program of Lifelong Learning & Continuing Development of Professional Competence*). As such the JAB has within their respective bodies, courses to upgrade and improve the skills and knowledge of members. Beyond our own activities and experience, however we offer no substantive insights into how this is being addressed by Higher Education. The question needs to be asked if it is a core function of Higher Education, and if so, Higher Education needs to be supported to offer and promote programs that encourage increased workforce participation and increased skill levels.

7. What is the relevance and applicability of the findings and approaches proposed in the United Kingdom paper, Higher Education at Work, for increasing skills levels in the workforce to Australia?

While the approaches proposed in the United Kingdom paper may have merit they should be cautiously considered in terms of the applicability to Australia. Anecdotal evidence from counterparts in the UK suggest that this system has led to a rigid, compliance based regime. The example therefore might be most useful to show what needs to be avoided rather than copied.

We further note the emphasis in the paper on trade skills while not as comprehensively addressing the ongoing development of graduate professional education. Birrell, Edwards and Dobson point to a growth in managerial, professional and associate professional positions in the Australian job market and the employer expectation that such positions now require degree level or above qualifications. The implication is that the skill shortage will become greater in the area of degree qualified people, not trades people.

Opportunities to participate in Higher Education

The following comments are in response to questions 8–11.

The JAB recommends: increased support to enable all young Australians to aspire to Higher Education regardless of income or family background.

There are two reasons why this is important. First, given the demographic trend with slowing birth rates and an aging population, it is important that the nation leverages its entire talent pool. Second, as a society known for its values of equal opportunity and fairness, participation in Higher Education and the advantages it offers socially and economically should be open to all young Australians.

In the last 30 years Higher Education moved from being the preserve of the few to a "mass" system. As the economy changes to an increasingly service and knowledge base, there will be a need for more Higher Education trained people. A progressive economy of inclusion and opportunity is more likely to deliver sustainable growth and wealth across the community.

To achieve this the education system at every level needs to be appropriately resourced to contribute. Education is a whole-of-life experience and the “drop out” points are well understood. More attention and support needs to be given to ensure greater numbers of young people complete high school to enter either higher education or the vocational and training sector. Elsewhere, we comment on the need for increased levels of articulation between these two tertiary sectors.

An important component of ensuring access is the review of income support for people pursuing further learning opportunities. Income support should take into account the cost of living and be indexed in line with cost of living increases.

In this regard we note that the Austudy personal income test has not been adjusted in recent years to reflect changes in wage conditions or living cost increases. The fact cited in the Discussion Paper that one in six students are working 20 hours or more per week is concerning in its impact not only on inclusion and access but also in the stress this places on student time to study.

The JAB recommends: placing greater value on high quality teaching with appropriate recruitment, reward and recognition structures for faculty in Higher Education and providing resources to reduce class sizes.

The JAB in their accreditation process of business faculties has noted with concern over the last few years the increase in staff–student ratios, the increased reliance on sessional staff and the reduced number of senior staff available to show leadership to junior faculty and ensure rigour in curriculum design and assessment standards.

The very significant increase in class size, and the diversity of the student population resulting from the large increase in international students, needs to be matched with a comparable increase in qualified teaching faculty and funding.

The student learning experience, whether face to face or in blended delivery, needs to be rigorously benchmarked across universities to maintain an acceptable standard to give assurances to business and the community of the worth of degree programs.

The student experience of Higher Education

12. How can the quality of the student experience within Australia’s Higher Education institutions be monitored nationally? Is there evidence that declining staff–student ratios have impacted on the quality of the student experience?

The JAB in response to questions on governance in the last section of this submission, speaks to the need for a national body to set policy and oversee Higher Education. As to the quality of the student experience, if defined as the overall community and campus environment and facilities, this is not a factor on which the JAB can provide meaningful comment. However, that part of the student experience which relates to academic standards and learning outcomes, which are dealt with in more detail in a later response, are being negatively impacted by the increases in staff–student ratios particularly in commerce courses. They are above the recommended level stipulated by the professional bodies in their university accreditation guidelines and above OECD levels. When the increasing diversity of the student cohort is factored into this mix, the student experience of university for both domestic and international students, as traditionally understood and valued, is at risk.

13. How can the quality of learning outcomes in Australian Higher Education be measured more effectively?

By learning outcomes the JAB includes the setting and achievement of academic standards. There is a need for all Higher Education providers to clearly define and share information with prospective students and employers regarding learning outcomes and academic standards. Further, academic standards and learning outcomes need to be measured and benchmarked nationally at a minimum. We are aware of a number of best practice institutions that provide clear articulation of learning outcomes to students in course prospectuses.

14. How do institutions measure the quality of their learning outcomes and how do they know they are nationally and internationally competitive?

The JAB regards the setting and attainment by students of learning outcomes as synonymous with setting and achieving academic standards. This being the case, there is a perception widely held by employers, and referred to earlier in this response, that learning outcomes are falling short of employers' expectations. The research cited in the Discussion Paper confirms this more qualitative feedback with 18 percent of academics surveyed reporting that academic standards had "decreased a great deal".

The employers' views however need to be seen in the context of the changes in student composition in business faculties with concentrations of up to 60 percent of students in accounting degree courses being international students. Given this high proportion and the poor employment outcomes experienced by these graduates, it is not difficult to see how such a perception has been formed with employers.

The JAB is cognisant of the broad diversity of demands placed on Higher Education by the international student body. This student composition in itself places an unprecedented strain and new challenges on academics and institutions.

It is also noteworthy that the focus on Higher Education producing "employable graduates" is relatively new and this, in tandem with the significant changes in the student body in the last 10–15 years, needs to be reviewed carefully for its implications and impediments to achieving appropriate learning outcomes.

The JAB recommends that Higher Education communicates more with employers regarding their graduate "outputs". We also believe a greater understanding of the learning process and learning outcomes would assist employers and industry and go some way to addressing what may be described as an expectations gap. The JAB also sees a responsibility to mediate between our members' needs and what Higher Education can achieve.

Further we support the achievement of learning outcomes through the university accreditation process which maintains ongoing contact with front line accounting faculty as well as Higher Education executives to ensure the alignment of course content with the professional admission programs. Our involvement also allows us to comment constructively on the context of learning in terms of class sizes and study facilities.

The JAB provide tangible support to the relevant sector of Higher Education by its joint funding of the Accounting and Finance Association of Australia and New Zealand (AFAANZ) as previously mentioned. Through this funding the JAB supports PhD scholarships and the annual academic conference.

We also jointly fund the representation on the International Accounting Education Standards Board of the International Federation of Accountants. Participation in this international forum ensures Australia is not only in a position to shape education standards and policy but also to communicate and transfer any changes quickly into the professional qualifying programs and associated Higher Education courses. This ensures that education standards are in line with international best practice.

The role of the Australian Universities Quality Agency (AUQA) as currently constituted is to measure and monitor learning outcomes across the education sector. Consideration should be given to review AUQA's charter to ensure an appropriate focus on benchmarking standards and learning outcomes across the Higher Education sector.

The JAB recommends the establishment of consistent, national benchmarks to allow Higher Education to objectively measure the attainment of learning outcomes both within Australia and internationally.

Connecting with other education and training sectors

15. To what extent should vocational education and training and Higher Education continue to have distinctive missions and how should these missions be defined?

The JAB believes that the common areas of importance across both the Higher Education and vocational and training (VET) sectors include quality, access and appropriateness to learning outcomes and qualifications.

The core objective for the education system of any developed economy is adequate access and provision for the acquisition of skills and knowledge. There needs to be an increased emphasis on whole-of-life education which is accessible and flexible.

In this context, we support a distinct mission for these two sectors and acknowledge the contribution of the VET sector and the diversity of pathways it provides. The VET sector has an important role to play in education and specifically we acknowledge its role in the training of para professionals such as accounting technicians.

We note with interest the increased number of dual providers that are operating successfully across both the Higher Education and VET sectors. However, we stress that the focus of the professional accounting bodies remains on the provision of quality Higher Education graduates for the profession.

16. Does the movement between the sectors of students with credit need to be improved? If so, in what ways?

The JAB have a view that the ability for able students and graduates to move between sectors needs to be improved. Currently only some 10 percent of VET accounting graduates from a technical background have their prior learning recognised when articulating into Higher Education and only three percent gain recognition for prior work experience and competencies.

To better facilitate the movement between sectors there needs to be increased transparency of learning outcomes and standards across the VET sector and Higher Education, and between individual institutions in each sector, leading to greater recognition of prior learning and qualifications. The professional bodies recognise that they also need to accelerate their recognition of prior learning and workplace experience while ensuring appropriate quality safeguards, and are currently working on this issue.

17. To what extent should relative provision between the sectors be planned or demand driven. What are the effects of current differences on funding, governance and regulation in limiting planning or influencing choice between the sectors?

A core part of the JAB's mandate is to ensure there is an appropriate supply of well qualified accounting graduates. As professional bodies we also are providers of life long education and provide a comprehensive range of programs for members to upgrade and broaden their skill base.

It is our observation that governments have not been successful at managing or driving demand through planning. It is a slow instrument to respond to major economic changes and complex demands. We encourage the Review Panel to ensure that pathways for student mobility and flexibility are improved. By increased transparency of learning outcomes there would be increased clarity and confidence to promote movement within and across sectors. The development of national protocols to deliver improved consistency in standards and efficiency and remove other impediments to student mobility is vital.

Higher Education's role in the national innovation system

19. By what mechanisms should research activities in Australian universities be supported?

The JAB strongly supports increased investment in research activities. To operate at the forefront of international business and to ensure the overall prosperity of the nation, a solid and world-class research sector is an essential investment on behalf of the future. In this context we favour a balance being maintained between what is considered "pure" research and that which is focused, topical, practical and applicable to ensure short as well as long term benefits accrue.

Each of the three bodies has been active in the support of accounting research. Each year significant funds are dedicated to a range of projects and to generate thought leadership papers to inform policy formulation. Also as mentioned previously, the JAB directly supports PhDs to complete their doctorates.

From the Discussion Paper it is noted that the overall level of funding for research in Australia lags behind other developed and developing nations with only four percent of Australia's research and development investment in the area of accounting.

Comment from academic members of the accounting bodies speaks of the current funding mechanisms' undue emphasis on administration, application processes, monitoring and regulation. However we support the continuation of the competitive nature of grant criteria and of linked industry grants to ensure not only the relevance of research but also the acknowledgement of industry's rightful contribution to research undertaken by Higher Education.

To this end we would support a review of overall university funding and specifically that given to research.

21. Do you believe there is a place in Australia's Higher Education system for universities that are predominantly 'teaching only' universities? If so, why?

The JAB sees the link between teaching and research, in line with the current mandate of the Higher Education sector, as important. The natural synergies that emerge from the pursuit of both activities is key to the standards of teaching and learning and to the ability of researchers to remain in touch with current issues. The creation and discovery of new knowledge is at the very heart of education and life long learning. Rigorous research, critical thinking and innovation are a core component of the teaching and learning cycle. To disconnect research from teaching would deliver a calcified curriculum.

In our strong support for this view, the JAB is however aware that academic promotion is based mainly on research. This impacts the focus of academic staff and ultimately affects academic priorities and can act to limit the time available to innovate in the teaching curriculum. We therefore support a process which equally values teaching to enable academics to excel and be recognised in either or both fields.

The JAB recommends: increased support for international students in accounting degrees to achieve improved employment outcomes in Australia.

With the growth of international enrolments in accounting far out pacing those of domestic graduates, the profession needs to look to this cohort for new employees.

The experience of accounting employers is that a significant proportion of international graduates seeking work in Australia as accountants are ill equipped for the workplace both in terms of communication skills and knowledge of the operation of Australian business. For this reason the employment outcomes for an international student with an accounting degree is uncertain. The influx of large numbers of international students has made education Australia's third largest export industry. To sustain the credibility of Australia in the international arena as a source of high quality accounting education and provide the accounting profession with a viable new source of recruits, international students need more support to acquire essential work ready skills.

The development of the Skilled Internship Migration Program – Accounting by the JAB is intended as one means to address the employment gap. This program commissioned in 2007 by the then Department of Immigration and Citizenship offers a bridge for international graduates seeking permanent residence and hence the right to live and work in Australia.

Australia's Higher Education sector in the international arena

22. Are there any unintended consequences of the current approach to internationalisation of Higher Education in Australia?

The JAB recommends that a full articulation of what "internationalisation" encompasses is required before the current strategy can be assessed or future strategy determined. This definition is important and needs to be made clear to all stakeholders. It appears that the current strategy, as seen primarily in the large increases in full fee paying international students, has been driven mainly by the reduction

in real terms of Commonwealth funding for domestic student places. This has had a range of unintended consequences not all of which are positive in terms of quality outcomes for Higher Education and individual institutions, and for domestic accounting graduates and the businesses that employ them.

Because of the overall reduction in Commonwealth funding for universities over the last 10 years universities have been faced with the necessity to diversify their revenue base, including aggressively pursuing full fee paying international students. They have done this extremely successfully, and education is now Australia's third largest export industry.

Australia has attracted international students to study in Australia on an unprecedented scale within OECD countries. This is only one part of an "internationalisation" strategy for Higher Education. This emphasis and the growth in international student numbers has been detrimental to the adequate provision of domestic accounting degree places because of the finite teaching resources of accounting departments.

Overall places for domestic accounting students in universities have increased by just five percent in the last five years while in the previous five years from the mid 1990s the number of places declined. Meantime the number of international students more than doubled. International students now contribute almost 60 percent of some universities' funding and this fact is acting to skew resourcing and priorities.

The understandable imperative to fund operations by university administrators, given the reduction in federal funding, has made it almost economically irrational for a vice chancellor to increase the number of Commonwealth funded domestic accounting places when either international or domestic full fee paying students contribute nearly three times the revenue to the university.

However, the revenue generated by students in business faculties has not resulted in equivalent levels of investment in those faculties. This has had a direct negative impact on the learning outcomes for accounting students due to a very significant increase in class sizes and class diversity with no comparable increase in qualified teaching faculty or funding as a result of the number of international students now studying in Australia.

This is likely to be exacerbated once the removal of full fee domestic students takes effect in 2009, further reducing the proportion of domestic students in accounting and related disciplines. The JAB understands that full fee domestic places are predominately in the commerce faculties of the Group of 8 universities and it is in these institutions therefore that the imbalance of domestic and international students is likely to further increase with the removal of full fee domestic places.

The presence of Non English Speaking Background (NESB) students in any faculty impacts on the curriculum and what is able to be taught and therefore potentially impacts on the overall standard and quality of courses. To ensure these students receive assistance to bridge the language gap, foundation courses and other employability courses should be offered and their benefits highlighted. These courses need to focus on English for academic purposes and specific purpose English, customised, in the case of accounting, to the professional work environment as opposed to generic English language training. To achieve this in the most efficient way a national open source curriculum should be made available to Higher Education and other providers with tertiary NESB students.

Another unintended consequence of the economic imperative faced by university heads has been the unrealistic inflated entrance scores of commerce faculties and accounting degree courses. A domestic student aspiring to a Group of 8 university needs on average a score of 95. This barrier has not been set by any attempt to match the level of intelligence and ability to the study of commerce but acts to control supply and ration domestic accounting places.

A further unintended consequence of full fee international students is that some have the expectation that as fee paying "customers" their fees represent a "success fee" and this may place pressure on academic faculty to award pass grades.

With the growth of international enrolments in accounting far out pacing those of domestic graduates, the profession has to look to this cohort for new employees and Higher Education needs therefore to give more consideration to improving the employment outcomes for international students.

23. What is an appropriate role for government in assisting the Australian Higher Education system to internationalise? On what principles should this role rest and what purposes should it serve?

As stated in response to Question 22 a clear definition of internationalisation is needed. This would enable appropriate strategies and measures of success to be developed and monitored.

We support the internationalisation of the curriculum and overall learning process to enable students to benefit from global trends, research and issues. We also support an increase in funding for students and academics to study overseas. We believe that it is important to gain and maintain international accreditation, recognition and benchmarks with overseas Higher Education providers as part of the internationalisation process.

Resourcing the system

The JAB recommends: support to universities to increase funding for PhD programs and offer commercially linked salaries for accounting faculty.

The twin forces of the aging academic workforce and the decline in the number of accounting students undertaking honours and entering PhD programs will lead to an extreme shortage of qualified faculty in the accounting profession.

Government funding that emphasises research output of international standard has the potential to down grade the contribution of teaching. It places pressure on faculty to research for promotion and can lead to a lower emphasis on the classroom experience.

OECD and Asian countries, particularly China are making significant investment not only to develop academic faculty but also to aggressively “poach” from other nations. There is also intense competition between Australian institutions for leading faculty. Australia will lose its competitive edge in the global knowledge economy if it does not ensure a sustainable academic profession.

28. What incentives or unintended consequences are there in the current arrangements for Higher Education funding?

The current funding arrangements for Higher Education, as the Discussion Paper notes, is made up of two main sources; public funds mainly as Commonwealth funding per student and private funds from a variety of activities particularly international student fees and competitive research grants and donations. This has led universities to focus their activities on securing private funds leading to a reduced investment in teaching and increased incentives for universities to prioritise research to win research funding.

The disproportional reliance on international student fees in many universities is of particular concern should this source of funding be unsustainable in the longer term. The current consequences of the high concentration of international students in accounting departments, as noted earlier, has led to increases in class sizes, lower contact hours for students, and the use of less trained and qualified sessional teachers. This has a negative impact on the overall student experience and achievement of learning outcomes.

In addition, given that the largest area of expenditure for institutions is staff salaries, without appropriate increases in public funding and an index linked salary component, universities will struggle to attract and retain quality academics in an increasingly globally competitive recruitment market. When the aging academic workforce is taken into account, together with the tight labour market to retain staff, the pressure on universities to meet salary expectations will grow given the widening gap between academic salaries and market rates, particularly in accounting and other business disciplines.

There are also examples where universities are unable to make the necessary investment in infrastructure and operating costs. This will become particularly acute as universities seek to implement major improvements in ICT platforms, provide e-learning delivery of courses and seamless and virtual access to library and other learning materials.

In accounting in particular there needs to be specific funding to develop the academic resources via increased support for PhD programs. A decline in the number of accounting students undertaking

honours and entering PhD programs will lead to an extreme shortage of qualified faculty in the accounting profession when the current 25 percent of academics aged 55 and over retire. Australia will lose its competitive edge in the global knowledge economy if it does not ensure a sustainable academic profession.

29. To what extent are the current funding models adequate to secure the future of Australia's Higher Education sector? If there are better models, what are they?

The current funding models are not adequate to secure the future of Australia. The needs of the sector have long outgrown the current funding model.

We support a Higher Education system that provides equal access to all and one where a secure funding base is provided by the Commonwealth Government. Given the importance of Higher Education a sustainable future should have less reliance on short term funds and international student fees. Higher Education must be a key priority for Australia and there is an urgent need to reverse the decline in government funding which has occurred over the last decade.

This will ensure that the incentives for excellence in teaching and research are at a level of investment that reflects Australia's requirements for the future.

Governance and regulation

31. Is it time to reshape tertiary education in Australia and streamline financing and regulatory arrangements? If so, what structural changes would you make and why?

The initiative to commission the Review of Australian Higher Education is itself an indication that there is a need to reform Higher Education in Australia.

An important outcome of the Review needs to be a rigorous attempt to rationalise the multiple priorities of the sector and remove the ad hoc nature of course structures and curriculum offerings. It is also important to provide the sector with funding to ensure stability, and predictability of resources for the long term, as well as transparent governance without additional overlays of compliance and reporting.

32. Is the level of regulation in the sector appropriate? If not, why not, and what should be done to reduce the level of regulation?

We acknowledge the experiences of the Higher Education sector in dealing with the complexity of priorities and compliance costs when dealing with the current layers of regulatory regimes. As part of this Review process the JAB would like to see a new governance model, independent of government albeit with the government represented.

33. Does Australia's Quality Assurance Framework need revision? If so, why? What changes would you make?

As the JAB has commented earlier, there needs to be a greater emphasis on setting and measuring quality in terms of achievement of learning outcomes. This could include benchmarking of standards both at a national and international level.

34. Are changes required to the Australian Qualifications Framework?

The AQF is a useful mechanism inter alia as it relates to vocational training. It enables students to be more mobile mid course, and also aids the movement of VET graduates to areas of demand for their different trades.

As representatives of graduate-based professionals, the JAB has no direct experience on which to base any specific recommendations for change.

35. Is there more that could be done to improve university governance? How should this be done?

The JAB acknowledges the leadership Higher Education executives demonstrate in managing complex institutions. We also support the continuous improvement that Higher Education has undertaken over the last decade in its governance, management structure and decision making.

To oversee the governance of Higher Education, consideration should be given to forming a national independent body representing a broad range of stakeholders. The role of this body will be to develop and implement a long term vision which will provide a stable framework for Higher Education, independent of government. This will enable Higher Education to deliver on its core functions and in particular produce an adequate supply of quality graduates and focus on research to support innovation. In doing so, Higher Education will play a vital role in building the economic, social and cultural capital of Australia.

Business implications of climate change

- **Project/investment analysis**
To achieve the Government's target for reducing Australia's greenhouse gas emissions, it will take significant business investment in low emissions technology. Accountants will undertake the analysis of such potential investment to determine whether it is economically feasible. In undertaking that analysis, accountants will need to incorporate a number of considerations, including the proposed price on emissions.
- **Cost-pass through**
It will be the accountants role to determine the cost impact of the proposed Carbon Pollution Reduction Scheme on individual businesses and advise on pricing accordingly. However, due to market forces, not all businesses will be able to respond to these price signals fully, thus impacting on their profitability.
- **Business improvement**
The proposed cost on emissions will encourage business to reduce their emissions through improvement to their processes. Accountants will have a significant role in identifying and analysing the cost and benefits of such improvements.
- **Disclosure of the financial impacts**
It is accountants who will determine the financial impact of the proposed Scheme for liable entities and disclose such impacts to the capital market. Such disclosure should also include the accountants determining and disclosing the expected impact on future results and any actions taken to date in relation to the proposed Scheme in directors' reports to stakeholders.
- **Assurance**
Accountants who are auditors will play a fundamental role in ensuring the robustness and integrity of the carbon trading market by assuring the emission data of liable entities. Accountants in business will need assist their employer's/clients have the information available and for it to be of such quality in order to satisfy such an assurance engagement.
- **Managing the purchase and disposal of carbon pollution permits**
Accountants, particularly those who work in treasury and finance areas of liable entities will play an important role in managing and advising liable entities on purchase and the trading of emission permits. This is because the purchase and trading of emission permits raises issues such as cash flow management and risk management (entering into forward contracts).
- **Tax issues emerging from the proposed Scheme**
Accountants working in the tax area will also have an important role to play in advising business on the tax implications emerging from the proposed Scheme
- **Leadership roles**
Accountants fill many leadership roles in business, particularly the Chief Financial Officer role. Given that the Scheme will have significant financial implications, the CFO will for many businesses be the executive that will take a leadership role in managing the businesses response to the proposed Scheme.

- **Financial reporting issues**
Accountants will have to determine how to report emissions trading and related matters such as the forward purchase of permits for accounting purposes. This will be especially important for liable entities where the proposed Scheme will have a material affect on the financial position of the business.
- **Collection of emissions data**
Given that emissions data will have a financial implication, accountants will have a role in the collection and reporting of emissions data. This would include helping to determine which methodology to use to calculate emissions.
- **Emissions profile**
Accountants will play an important role in calculating not only their employer's/clients current emissions but also their forward emissions profile. Such a profile can be incorporated into strategic planning, investment decisions and budgeting.
- **Compliance obligations**
Accountants who often handle many of the compliance obligations of business will play a role in assisting business meet their compliance obligation under the proposed Scheme.
- **Cash flow**
Accountants will have to consider the impact of having to purchase emission permits on annual budgeting of their employer/client.
- **Systems**
Accountants will be involved in ensuring the integration of the systems to capture emissions data and the financial systems so that a business can effectively manage the Scheme.
- **Impact on the valuation of assets**
Accountants will be involved in calculating and reporting on the potential impact on the valuation of assets and liabilities of the Scheme.

The impact of the Carbon Pollution Reduction Scheme will be on all business

Through the passing on of the cost on carbon emissions by liable entities, all businesses will be impacted upon by the proposed Scheme to various degrees. Therefore many businesses outside the 1,000 liable entities will also be demanding the services of accountants to assist in their response to these cost pressures. In particularly, accountants would have key roles in determining the cost impact of the Scheme on such businesses, in order for such businesses to determine their own changes to pricing (where possible) and to undertake cost-benefit analysis on investment and process improvements that improves energy efficiency (and hence reduce costs).