

ROLE OF TAX KNOWLEDGE AND SKILLS: WHAT ARE THE GRADUATE SKILLS REQUIRED BY SMALL TO MEDIUM ACCOUNTING FIRMS

SHARON HAYES, BRETT FREUDENBERG AND DEBORAH DELANEY*

ABSTRACT

Small and medium accounting (SMA) firms can account for approximately 40 per cent of graduate recruitment in Australia. Does the context of obtaining employment with a SMA firm require graduates to have certain knowledge and skills? This article reports the findings of a study into the technical and generic skills required by graduates commencing employment within an Australian SMA firm. The findings suggest that together with financial statement and reporting, tax knowledge is highly valued for graduates to a SMA firm. In terms of tax, this also includes the ability to use tax software. Also, the generic skills of communication, teamwork and ethics are highly regarded. This raises the question as to whether current university degrees are providing adequate technical and generic skill development for those graduates seeking employment with a SMA firm.

Keywords: Accounting; Graduates; Technical skills; Generic skills; Small to medium accounting; Employment; Work-ready.

* Sharon Hayes, Griffith University, Email: s.hayes@griffith.edu.au; Brett Freudenberg, Associate Professor, Griffith University, Email: b.freudenberg@griffith.edu.au; Deborah Delaney, Senior Lecturer, Griffith University, Email: d.delaney@griffith.edu.au.

I INTRODUCTION

It has been argued that undergraduate degrees are currently unable to completely prepare Commerce graduates, because the learning outcomes of most accredited undergraduate degrees in Australia do not align with the profession's requirements or expectations.¹ This in part is due to the role of the professional accountant continuing to undergo significant change, adapting from its traditional role of information provider and record-keeper, to the role of business advisor and information analyst.² Freeman and Wells suggest these changes are attributable to business globalisation and task automation due to technological advancements.³

These changes require critical reflection of the graduate skills of students entering into the accounting profession. The literature demonstrates an element of uncertainty as to which skills are required for newly prepared graduates entering the profession.⁴ This is compounded by the fact that graduates may gain employment in a wide variety of employment contexts, including public accounting practices of different sizes, or corporate or government environments. Greater challenges are also predicted as the trend of outsourcing basic accounting services continues, as these entry level tasks commonly provide a source of skill enhancement and development for new accounting employees.⁵

Small to medium accounting (SMA) firms are responsible for a significant portion of graduate employment. Figure 1 illustrates the destination in 2015 of 1830 domestic Australian accounting graduates, and demonstrates that more than 40 per cent of graduates attained employment within either a small (2–19 employees) or medium (20–99 employees) accounting firm.⁶ Consequently, SMA firms are a significant employer of

¹ Leopold Bayerlein and Mel Timpson, 'Do Accredited Undergraduate Accounting Programmes in Australia Meet the Needs and Expectations of the Accounting Profession?' (2017) 59(3) *Education + Training* 305.

² W Steve Albrecht and Robert Sack, *Accounting Education: Charting the Course through a Perilous Future* (AAA, 2000); Nas Ahadiat and Rose M Martin, 'Attributes, Preparations and Skills Accounting Professionals Seek in College Graduates for Entry-Level Positions vs. Promotion' (2015) 8(1) *Journal of Business and Accounting* 179.

³ Mark Freeman and Paul Wells, 'Reducing the Expectation Gap: Using Successful Early Career Graduates to Identify the Capabilities that Count' in Elaine Evans, Roger Burritt and James Guthrie (eds), *Future Proofing the Profession: Preparing Business Leaders and Finance Professionals for 2025* (RMIT and Chartered Accountants ANZ, 2015) 67–78.

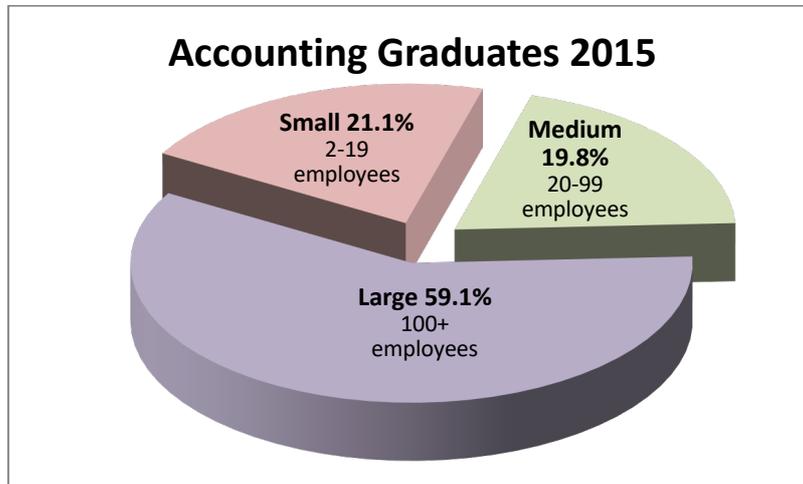
⁴ Bryan Howieson, Phil Hancock, Naomi Segal, Marie Kavanagh, Irene Tempone and Jenny Kent, 'Who Should Teach What? Australian Perceptions of the Roles of Universities and Practice in the Education of Professional Accountants' (2014) 32 *Journal of Accounting Education* 259–75; Irene Tempone, Marie Kavanagh, Naomi Segal, Phil Hancock, Bryan Howieson and Jenny Kent, 'Desirable Generic Attributes for Accounting Graduates into the Twenty-First Century: The Views of Employers' (2012) 25(1) *Accounting Research Journal* 41; Seedwell T M Sithole, 'Quality in Accounting Graduates: Employer Expectations of the Graduate Skills in the Bachelor of Accounting Degree' (2015) 11(22) *European Scientific Journal* 165.

⁵ Sally Chaplin, 'Accounting Education and the Prerequisite Skills of Accounting Graduates: Are Accounting Firms Moving the Boundaries?' (2017) 27(1) *Australian Accounting Review* 61.

⁶ The scope of this study is restricted to SMA firm employers. The definition of a 'large' employer, according to the Australian Bureau of Statistics (ABS), is one with more than 200 full-time employees, whilst Graduate Careers Australia (GCA) identifies 'large' employers as having 100 or more employees. Whilst this creates a conflicting definition, this research study accords with the GCA definition and focuses upon SMA firm employers with 2–99 employees.

Australian accounting graduates, and it is important to consider their perspective as to the skills required by graduates.

Figure 1: Accounting undergraduate employment destination by employer size⁷



Current literature indicates that accounting employers require both technical and generic skills for accounting graduates commencing employment.⁸ However, most studies have investigated the skills of accounting graduates in accounting firms of all sizes, government employers, private corporations, public corporations, and other non-accounting industry employers. Prior research has not adequately considered graduate attributes specific to SMA firms, and it is recognised that the skill emphasis for SMA firms may not be compatible with other employment contexts due to the differences in graduate duties.⁹

Howieson identifies that the expectations for graduates will differ dramatically across different employer groups, reinforcing the view that the required skills to make a graduate work-ready will depend upon the employment role.¹⁰ A recent comparison of accounting practices confirmed that smaller firms usually have a larger number of small business clients across various industries, exposing graduates to a broader range of tasks and skill requirements.¹¹ The expansion by SMA firms to provide more complex and

⁷ Graduate Careers Australia, 'Graduate Outlook 2015' in *The Report of the 2015 Graduate Outlook Survey: Perspectives on Graduate Recruitment* (2014) Graduate Destinations Report Table T24 <www.graduatecareers.com.au>.

⁸ John Bowden, Gail Hart, Bruce King, Keith Trigwell and Owen Watts, 'Generic Capabilities of ATN University Graduates' (Department of Education, Australian Government, Training and Youth Affairs, 2000); Beverley Jackling and Kim Watty, 'Generic Skills' (2010) 19(1-2) *Accounting Education* 1; Tempone et al, above n 4.

⁹ Binh Bui and Brenda Porter, 'The Expectation-Performance Gap in Accounting Education: An Exploratory Study' (2010) 19(1-2) *Accounting Education: An International Journal* 23; Mary Low, Vida Botes, David De La Rue and Jackie Allen, 'Accounting Employers' Expectations – The Ideal Accounting Graduates' (2016) 10(1) *e-Journal of Business Education & Scholarship of Teaching* 36.

¹⁰ Howieson et al, above n 4.

¹¹ Daniel Bishop, 'Context, Agency and Professional Workplace Learning: Trainee Accountants in Large and Small Practices' (2017) 59(5) *Education + Training* 516.

commercially oriented accounting services is also leading to changes in the skills and attributes a work-ready accounting graduate should exhibit.¹²

In aiming to provide work-ready accounting graduates to SMA firms, an improved understanding of the required skills for the SMA employment context is needed. Given the proportion of graduates securing employment within SMA firms, it is important to ensure that graduates develop the necessary skills. This is significant, as SMA firms may have limited financial resources to support and train graduates during the initial stages of employment as they transition from graduate to professional. A continued failure to provide sufficiently skilled work-ready graduates to SMA firm employers may lead to further decreases in graduate employment.¹³

A 'work-ready' graduate is seen as a graduate who has obtained the desired skills upon completion of their tertiary education to competently commence employment.¹⁴ These consist of both generic and technical skills, with Bui and Porter arguing that the necessity for each attribute requires consideration to be given to the specific employment context, and suggesting that SMA firms place relatively more importance on technical skills.¹⁵ However, in a small study by Low et al from New Zealand with employers of various sizes, they found no evidence upon which to infer that SMA firms place more importance on particular skills when compared to larger firms.¹⁶ In contrast, Tempone et al in their 2012 study did find the size of accounting firm employer and associated employment context was significant.¹⁷ This study seeks to investigate the technical and generic skills required for a work-ready graduate commencing specifically within a SMA accounting firm. The overarching research question that this article seeks to address is: 'What are the technical and generic graduate skills required in an Australian SMA firm?' The findings suggest that, unlike larger firms, tax knowledge and the ability to use tax software is a desired graduate skill for a majority of SMA firms.

Section II of this article will provide a discussion of graduate skills and their classification as technical or generic skills, followed by a broad summary of recent graduate trends. Section III will provide the research methodology undertaken and the demographics of the participants, which will be followed by the results in Section IV. Through the analysis of the results recommendations will be proposed in Section V, with future research being outlined in the Section VI of the article before concluding.

¹² Samantha Sin and Nicholas McGuigan, 'Fit for Purpose: A Framework for Developing and Assessing Complex Graduate Attributes in a Changing Higher Education Environment' (2013) 22(6) *Accounting Education* 522.

¹³ Department of Employment, Australian Government, *Labour Market Research – Accountants Australia June Quarter 2017* (Labour Market Research and Analysis Branch, 2017) <https://docs.employment.gov.au/system/files/doc/other/ausaccountants_1.pdf>.

¹⁴ Tempone et al, above n 4.

¹⁵ Bui and Porter, above n 9.

¹⁶ Low et al, above n 9.

¹⁷ Tempone et al, above n 4.

II GRADUATE SKILLS

Graduate attributes are defined as the qualities, skills and understandings that students should develop during their time with a university.¹⁸ The literature demonstrates graduate attributes as diversely understood by a cross-section of academics,¹⁹ consisting of a broad range of skills and attributes acquired through completion of an undergraduate degree. De la Harpe and David argue that they are a critical outcome of a modern tertiary education, and graduates need to be capable of demonstrating the necessary skills when seeking graduate employment.²⁰ These skills go beyond just the disciplinary expertise and technical knowledge that have traditionally been a focus for university courses, and extend to particular human behaviours, dispositions and capabilities.²¹

Graduate skills can be classified as either generic or technical skills, with various employment duties and responsibilities ultimately requiring different graduate attributes. Technical skills have been described as context-specific and practical,²² and represent for accounting such things as debits and credits, taxation knowledge and preparing financial accounts, as well as book-keeping skills, information technology, and the ability to understand accounting concepts.²³ Technical skills are considered necessary to perform the tasks that are specific to accountants and should be developed from the knowledge of content areas as prescribed. In comparison, generic attributes include those non-accounting skills that may be used across a variety of industries and include communication, teamwork and problem-solving. A more detailed discussion of these concepts follows.

A Technical attributes

Bayerlein and Timpson argue that whilst tertiary accounting education is bound by clear standards through the use of accreditation, graduates can continue to lack adequate knowledge and skills.²⁴ Technical skills such as book-keeping, information technology, analysis, and basic accounting concepts, are recognised as desirable.²⁵ Dale argues, however, that the role for graduates is becoming more complex because they are expected to apply judgement and problem-solve across a whole range of areas, and

¹⁸ Bowden et al, above n 8.

¹⁹ Simon Barrie, 'A Conceptual Framework for the Teaching and Learning of Generic Graduate Attributes' (2006) 32(4) *Studies in Higher Education* 439; Sin and McGuigan, above n 12; Calvin Smith, Sonia Ferns and Leoni S Russell, 'Conceptualising and Measuring "Employability" – Lessons from a National OLT Project' (ACEN National Conference, Australian Collaborative Education Network Limited, Gold Coast, 2014) 1.

²⁰ Barbara De La Harpe and Christina David, 'Major Influences on the Teaching and Assessment of Graduate Attributes' (2012) 31(4) *Higher Education Research & Development* 493.

²¹ Sin and McGuigan, above n 12.

²² Marie Kavanagh and Lyndal Drennan, 'What Skills and Attributes Does an Accounting Graduate Need?' (2008) 48 *Accounting and Finance* 279.

²³ Beverley Jackling and Paul De Lange, 'Do Accounting Graduates' Skills Meet the Expectations of Employers? A Matter of Convergence or Divergence' (2009) 18(4-5) *Accounting Education* 369; Bui and Porter, above n 9; Low et al, above n 9.

²⁴ Bayerlein and Timpson, above n 1.

²⁵ Bui and Porter, above n 9.

simply reporting data is no longer sufficient for the desired solutions and insight.²⁶ Others have confirmed that the ability to use accounting software is necessary due to the recent introduction of advanced hardware and software technology into accounting practices, and the dramatic changes to data processing.²⁷ Chaplin concludes that SMA firms typically identify that future graduates will require more specialised skills as a result of outsourcing trends, with analytic skills deemed as the most important.²⁸ Sithole surveys of the technical skills required of graduates across a broad range of accounting employers in Swaziland found that of the technical skills listed, employers rated computing techniques, reporting skills, functional competencies and measurement skills as important.²⁹

Pan and Perera contend that simply aligning the accounting programmes with existing accreditation guidelines will not ensure graduates are work-ready, due to a lack of consensus between typical employer requirements and current accounting programmes.³⁰ A growing gap between accounting education and the requirements of practitioners, particularly in relation to preparing graduates and accounting knowledge, was identified by Rebele and St Pierre when analysing accounting education literature ranging from 1991 to 2015.³¹

It appears that until recently tax as discipline knowledge has to an extent reduced in its importance with accounting professional bodies. Juchau and Neale traced the history of tax in Australian accounting degrees from 1945 to 1995.³² Their observations noted that during these 50 years, tax varied from being initially external to degrees to then being a 'regular feature' in the late 1950s.³³ Tax was present in most commerce degrees in the 1960s even if not a separate course and instead intermingled with other law or accounting courses.³⁴ This developed from the 1970s to the late 1980s with tax generally part of the curriculum due to accreditation requirements.³⁵ However, by the end of the 1980s there was some reconsideration about what extent was tax coverage in accounting degrees required, with a Task Force Report suggesting a weighting of 11 per cent to 15 per cent in degrees to cover legal structures and processes, as well as revenue laws.³⁶ It

²⁶ Jason Dale, 'Preparing Business Leaders and Accountants for Future Financial Leadership' in Elaine Evans, Roger Burritt and James Guthrie (eds), *Future Proofing the Profession: Preparing Business Leaders and Finance Professionals for 2025* (RMIT and Chartered Accountants ANZ, 2015) 88.

²⁷ Ali Yaftian, Sohelia Mirshekary and Dessalegn Mihret, 'Learning Commercial Computerised Accounting Programmes: Perceptions and Motivations' (2017) 30(3) *Accounting Research Journal* 312.

²⁸ Chaplin, above n 5.

²⁹ Sithole, above n 4.

³⁰ Peipei Pan and Hector Perera, 'Market Relevance of University Accounting Programs: Evidence from Australia' (2012) 36 *Accounting Forum* 91.

³¹ James Rebele and E Kent St Pierre, 'Stagnation in Accounting Education Research' (2015) 33(2) *Journal of Accounting Education* 128.

³² Roger Juchau and Ray Neale, 'Taxation in Australian Undergraduate Accounting Courses: A Review and Case Note' (2001) 10(1) *Accounting Education* 27.

³³ *Ibid.*

³⁴ *Ibid.*, citing F Devonport, 'The Place of Taxation in a Commerce Degree' (Proceedings of the AAUTA Convention, University of Newcastle, August 1968).

³⁵ *Ibid.* 29.

³⁶ William P Birkett, 'The Demand for, and Supply of Taxation Education: A Delphi Study' (Task Force for Accounting Education in Australia, sponsored by the Australian Society of Accountants, the Institute of

appears that this may have been the impetus for some tertiary institutions to reduce their tax courses from a full-year course (consisting of two units) to a half-year course (of one unit). Curiously, this was occurring at a point in time when Australia was experiencing extensive tax reform including the introduction of capital gains tax, fringe benefits tax and the imputation system for corporations. The threat of the reduced length of tax courses in accounting degrees was in part the impetus for the formation of the Australasian Tax Teachers Association (ATTA), with the first ATTA Conference held at the University of NSW in 1989.³⁷ Nevertheless, by the end of 1995 tax was a specified area of which accounting accreditation required a demonstrated understanding and knowledge, although not necessarily covered over 12 months.³⁸

However, by the end of the first decade of the third millennium this was further threatened as CPA Australia (Certified Practising Accountants) removed the requirement for tax (and audit) as a required course in an undergraduate degree to seek membership. The current university curriculum requires 13 knowledge areas to be covered to ensure that an Australian accounting degree will be eligible for professional accreditation as prescribed by CPA Australia and Chartered Accountants Australia and New Zealand (CAANZ).³⁹ Table 1 provides a brief explanation of each content area to be included for accreditation, with the most recent amendment to the curriculum occurring in 2012 (which was relevant at the time of this study). It is noted that at the time of this study for CPA Australia audit and taxation were not required as a compulsory inclusion (as indicated with a cross in Table 1), instead requiring that a non-compulsory course is made available for students. However, starting from mid-2018 CPA Australia has changed its accreditation requirements so that now it once again requires an undergraduate tax course.⁴⁰ This change appears largely to be in response to the educational requirements of the Tax Practitioner Board that includes requiring two courses in tax law for registration as a Tax Agent.⁴¹

It should be noted that Table 1 on the whole includes only the technical knowledge areas, except for the generic skill requirement for 'ethics'.

Chartered Accountants in Australia with the Accounting Association of Australia and New Zealand, Melbourne, 1989).

³⁷ Fiona Martin, 'A History of the Australasian Tax Teachers Association' (2013) 8(1) *Journal of the Australasian Tax Teachers Association* 31; Brett Freudenberg, 'Conference Dinner Address' (Presented at the Annual ATTA Conference, ATTA Newsletter, February 2018) <<https://www.business.unsw.edu.au/About-Site/Schools-Site/Taxation-Business-Law-Site/AttaNews/ATTA-News-Feb-2018.pdf>>.

³⁸ Juchau and Neale, above n 32, 29.

³⁹ CPA Australia and Institute of Chartered Accountants in Australia, 'Professional Accreditation Guidelines for Australian Accounting Degrees' (2012) <<http://www.cpaaustralia.com.au/cps/rde/xbcr/cpa-site/international-accreditation-guidelines.pdf>>.

⁴⁰ See CPA Australia, *Changes to Advanced Taxation* <<https://www.cpaaustralia.com.au/cpa-program/cpa-program-candidates/your-enrolment/advanced-taxation/changes-to-advanced-taxation>>.

⁴¹ The education requirements for a tax agent include one accounting course, three commercial law courses, and two tax law courses. See Tax Practitioners Board, Australian Government, *Qualifications and Experience for Tax Agents* (5 March 2018) <<https://www.tpb.gov.au/qualifications-and-experience-tax-agents>>.

Table 1: Core knowledge areas required for accreditation of a Bachelor's degree with CPA Australia or CAANZ (up to 30 June 2018)

Knowledge area	Description and/or examples	CPA	CAANZ
Accounting information systems	Productivity software; file and database management systems; accounting information systems in business; systems development and maintenance; e-commerce	✓	✓
Accounting systems and processes	Understanding financial statements and recording financial transactions, including different types of financial statements; using accounting software to record and report business transactions	✓	✓
Accounting theory	Theoretical issues and concepts underlying the practice of accounting, finance and related disciplines; role of the conceptual framework in contemporary accounting	✓	✓
Audit and assurance	Nature and process of auditing; regulatory and professional environment; auditing standards and audit process	✗	✓
Commercial law	General legal knowledge relating to the business environment; understanding risks and responsibilities that impact that environment	✓	✓
Corporations law	National corporate law framework as legislated; its commercial application to the business environment	✓	✓
Economics	Micro – demand and supply; markets and pricing; factor markets; income distribution and market failure. Macro – performance structure; behaviour of the financial economy	✓	✓
Ethics across the curriculum	Ethical decision-making models, principles and values across the curriculum; encouraging debate on ethical issues using practical cases where possible	✓	✓
Finance	Business finance and treasury function; analysis and measurement of an entity's financial position; current treasury developments and relevant issues	✓	✓
Financial accounting	Recording and reporting financial transactions including groups and companies; theoretical issues and concepts underlying accounting practice; current financial accounting and analysis issues for international accounting	✓	✓
Management accounting	Budgeting; product and service costing; control and performance evaluation; strategic management accounting; relevant numerical and analytical skills and current theoretical knowledge	✓	✓
Quantitative methods	Descriptive statistics; frequency and probability distributions; hypothesis testing; simple linear regression and correlation	✓	✓
Taxation	Australian taxation knowledge and administration	✗	✓

Osmani et al conducted an extensive literature review on graduate attributes and employability across accounting, business and management, and computer science.⁴² Thirty-nine studies were considered, with many recognising the concern of graduates' skills failing to meet employer expectations and requirements, and noting the exacerbation due to lack of communication between education and industry. The most

⁴² Mohamad Osmani, Vishanth Weerakkody, Nitham Hindi, Rajab Al-Esmail, Tilla Eldabi, Kawaljeet Kapoor and Zahir Irani, 'Identifying the Trends and Impact of Graduate Attributes on Employability: A Literature Review' (2015) 21(4) *Tertiary Education and Management* 367.

commonly cited technical graduate skills included: technical expertise; financial skills; analytical skills; practical and professional skills; technological skills; knowledge of business functions; general knowledge; and accounting research skills.⁴³ Yap, Ryan and Yong recognise that academic research focus has tended to shift to generic skills due to a presumption that technical skills will already be adequate.⁴⁴ The definition and identification of generic attributes is detailed next.

B Generic attributes

Generic skills can be referred to as non-technical skills,⁴⁵ soft skills⁴⁶ or employability skills,⁴⁷ and have been described as the non-accounting skills necessary to advance or apply the technical skills within the accounting employment context.⁴⁸ Examples of generic skills include: teamwork, written and oral communication, self-management, critical thinking, interpersonal skills and problem-solving.⁴⁹ Research about generic skills has typically highlighted concerns with the generic skills obtained by accounting graduates, whilst reaffirming the 'expectation gap' between the skill levels attained and employer expectations.⁵⁰

Hancock et al recognised the sought-after generic skills for graduates as including 'written and verbal communication, self-management, teamwork, initiative and enterprise, problem-solving, technological competence and planning and organising skills'.⁵¹ Critical thinking, problem-solving and communications,⁵² as well as team skills, interpersonal skills and verbal communication have also been identified as lacking amongst accounting graduates.⁵³ Tempone et al used a frequency analysis to rate the importance of non-technical skills amongst employers for the twenty-first century,

⁴³ Ibid 371, Table 6.

⁴⁴ Christine Yap, Suzanne Ryan and Jackie Yong, 'Challenges Facing Professional Accounting Education in a Commercialised Education Sector' (2014) 23 *Accounting Education* 562.

⁴⁵ Low et al, above n 9.

⁴⁶ R De Villiers, 'The Incorporation of Soft Skills into Accounting Curricula: Preparing Accounting Graduates for Their Unpredictable Futures' (2010) 18(2) *Meditari Accountancy Research* 1.

⁴⁷ Denise Jackson, Ruth Sibson and Linda Riebe, 'Delivering Work-Ready Business Graduates – Keeping Our Promises and Evaluating Our Performance' (2013) 4(1) *Journal of Teaching and Learning for Graduate Employability* 2.

⁴⁸ Ibid.

⁴⁹ Denise Jackson and Elaine Chapman, 'Non-Technical Competencies in Undergraduate Business Degree Programs: Australian and UK Perspectives' (2012) 37(5) *Studies in Higher Education* 541; Phil Hancock, Bryan Howieson, Marie Kavanagh, Jenny Kent, Irene Tempone and Naomi Segal, 'Accounting for the Future: More Than Numbers' (Final Report, Australian Learning and Teaching Council, 2009) vol 1; Jackling and Watty, above n 8.

⁵⁰ Kavanagh and Drennan, above n 22; Jackling and De Lange, above n 23; Lyn Daff, Paul De Lange and Beverley Jackling, 'A Comparison of Generic Skills and Emotional Intelligence in Accounting Education' (2012) 27(3) *American Accounting Association* 627; Tempone et al, above n 4. Diane Bunney, Elaine Sharplin and Christine Howitt, 'Generic Skills for Graduate Accountants: The Bigger Picture, a Social and Economic Imperative in the New Knowledge Economy' (2015) 34(2) *Higher Education Research & Development* 256.

⁵¹ Hancock et al, above n 49.

⁵² Jackling and Watty, above n 8.

⁵³ Jackling and De Lange, above n 23.

identifying communication, teamwork and interpersonal skills, and self-management as the most critical for accounting graduates.⁵⁴

C Recent graduate trends

The recent Graduate Outlook Report identifies over one-quarter of surveyed graduate employers (26.8 per cent) as experiencing trouble sourcing graduates, with accounting listed as the third highest disciplinary area causing concern.⁵⁵ In addition, a recent report on accountants demonstrated that whilst a surplus of accounting graduates exists, only 76.2 per cent obtained full-time employment in 2016 (down from 88.6 per cent in 2008), of which only 52.3 per cent were employed as accountants.⁵⁶ According to industry commentary, this could be due to the insufficiency of tertiary training and the misalignment of accounting graduates with the needs of modern accounting practice.⁵⁷ A recent study, in which 97 per cent of survey participants fall within the SMA category, noted that 21 per cent of all firms currently outsource, with an additional 35 per cent looking to outsource in the future, a factor that may further contribute to declining graduate employment.⁵⁸

Previous research thus far has not focused on identifying the required graduate attributes for Australian SMA firm employers. Instead, research has been conducted across all employment environments including SMA firms and Big Four accounting firms, corporations, government and private employers, with little or no consideration or distinction of the employment contexts.⁵⁹ This means that there is a gap that remains to be investigated, so that specific technical and generic attributes can be identified as being preferable for an accounting graduate who seeks to commence employment within a SMA firm. The purpose of the research reported in this article is to address the literature gap.

III RESEARCH METHODOLOGY

The literature demonstrates that the attributes obtained by graduates are critical to their successful employment, and employers require a mix of skills that are either technical or generic. The research question to be addressed therefore is: 'What are the technical and generic skills required by an Australian SMA firm?'

A mixed methods investigation of the desired graduate attributes with respect to SMA firm employers was used, involving the completion of an online survey, followed by semi-structured interviews to answer the research question. The mixed methods design was considered appropriate as it can investigate the phenomenon in its real-life context,⁶⁰ as

⁵⁴ Tempone et al, above n 4.

⁵⁵ Graduate Careers Australia, above n 7, 6.

⁵⁶ Department of Employment, Australian Government, above n 13.

⁵⁷ Ibid 6.

⁵⁸ Chaplin, above n 5.

⁵⁹ Kavanagh and Drennan, above n 22; Hancock et al, above n 49; Jackling and De Lange, above n 23; Tempone et al, above n 4.

⁶⁰ Margaret McKerchar, *Design and Conduct of Research in Tax, Law and Accounting* (Thomas Reuters, 2010) 103.

well as provide rich and detailed information through a variety of data collection methods.⁶¹

A Sample selection

The sample includes SMA firms listed within online membership directories of the three Australian professional accounting bodies: CAANZ; CPA Australia; and the Institute of Public Accountants (IPA). The sampling frame includes SMA firms employing between 1 and 99 full-time (or equivalent) employees, aligning with the GCA definition of both small and medium accounting firm employers, having a range between 2 and 99 employees. Convenience sampling was used to select firms located within 100 km of the Gold Coast (Australia) region,⁶² which was considered to be sufficient to provide a broad viewpoint of required graduate skills, and included employers within the Gold Coast and Brisbane regions of Queensland. Selection was further limited by the requirement that the SMA firm had previously hired a commerce graduate within the past 10 years.

Prospective participants were contacted via email. The unit of analysis to be sampled was identified as a senior staff member within the SMA firm who is actively involved with graduate recruitment decision-making.⁶³ Thirty-four suitable participants were invited to attend an interview within the timeframe of the study, with 12 participants ultimately participating in the project. Whilst the number of participants is small, it equates to a response rate of 35.2 per cent, and provided a rich and detailed interview information to be supported by survey findings.⁶⁴

Semi-structured interviews were used and included open-ended questions to address the overarching research question. An interview guide was used at each interview for consistency, and including scripted interview questions along with an introduction, explanatory notes, and pre-interview checklist. Examples were also listed to be used to ensure the participant understood the questions in context, with care taken by the interviewer not to lead the participant with their responses. The data generated by the semi-structured interview questions was eclectically coded amongst a number of developing themes to enable reflection and analysis,⁶⁵ and used to identify key themes and patterns to draw conclusions from them.⁶⁶ Data was also collected from the interview participants via an online survey, including demographic information, followed by the desirability of 20 commonly identified commerce graduate skills. To provide support for the qualitative responses, survey participants were asked to use Likert-type responses to provide information in relation to the desirable attributes that make an accounting graduate work-ready in a SMA firm.

⁶¹ Shan L Pan and Barney Tan, 'Demystifying Case Research: A Structured – Pragmatic – Situational (SPS) Approach to Conducting Case Studies' (2011) 21 *Information and Organisation* 161.

⁶² Rosalind Edwards and Janet Holland, *What Is Qualitative Interviewing?* (A&C Black, 2013).

⁶³ Melvin Ember and Carol R Ember, 'Testing Theory and Why the "Units of Analysis" Problem Is Not a Problem' (2000) 39(4) *Ethnology* 349.

⁶⁴ Unfortunately, due to the random sampling technique over an extended period of time, it is not possible to test for a non-response bias. Accordingly, the results need to be considered with this limitation in mind.

⁶⁵ Jane Towers-Clarke, 'Undergraduate Accounting Students: Prepared for the Workplace?' (2015) 8(1) *Journal of International Education in Business* 37.

⁶⁶ Mark N K Saunders, Philip Lewis and Adrian Thornhill, *Research Methods for Business Students* (Pearson, 7th ed, 2015).

The survey data is used for comparative analysis between the two sources to facilitate a deeper understanding, and can be used to further support the interview findings as part of the mixed methods research.

B Descriptive statistics

Table 2 presents the demographic details of the 12 participants, including the location of their firm, the size of the firm by reference to full-time employees, the position they hold within the firm, and the number of graduates employed within the past 10 years. The data in Table 2 indicates that all participants have an office within the greater Gold Coast or Brisbane regions, with firms classified as either small (n=3), very small (n=3), or medium (n=6).

Table 2: Demographic information

Participant	Firm location	Firm size	Job title	Number of graduates (past 10 years)
1	Southern Gold Coast/ Northern NSW Mid/ Central Gold Coast and Hinterland	Very small (<5)	Owner/Sole practitioner	1–2 graduates
2	Mid/ Central Gold Coast and Hinterland Northern Gold Coast/ Logan	Small to medium (21–100)	Other: HR Business partner	10+ graduates
3	Brisbane City and Surrounds	Small to medium (21–100)	Chief Operations Officer (CEO)	10+ graduates
4	Brisbane City and Surrounds	Small to medium (21–100)	Partner	6–10 graduates
5	Brisbane City and Surrounds	Small to medium (21–100)	Accountant	6–10 graduates
6	Brisbane City and Surrounds	Small to medium (21–100)	Senior management	10+ graduates
7	Mid/ Central Gold Coast and Hinterland	Small to medium (21–100)	Partner	6–10 graduates
8	Mid/ Central Gold Coast and Hinterland	Small (6–20)	Owner/Sole practitioner	6–10 graduates
9	Mid/ Central Gold Coast and Hinterland	Small (6–20)	Owner/Sole practitioner	3–5 graduates
10	Mid/ Central Gold Coast and Hinterland	Small (6–20)	Partner	10+ graduates

11	Brisbane City and Surrounds	Very small (<5)	Owner/Sole practitioner	1–2 graduates
12	Mid/ Central Gold Coast and Hinterland	Very small (<5)	Owner/Sole practitioner	10+ graduates

Table 3 illustrates the services provided by each participating firm. Participants selected all applicable services from the 10 categories listed, and provided details of any additional services offered by selecting 'Other'. This demonstrates most of the firms involved with financial statements, tax compliance, business set-up and book-keeping services. A number of firms were more specialised, such as firm #3 that focused on forensic accounting and insolvency. This highlights that not all SMA firms are homogenous, with some SMA firms being boutique firms with key specialisations rather than a broad practice base. It can be expected that those specialised firms could have different graduate needs compared with those firms with a broader practice. Consequently, this needs to be considered when analysing the results.

Table 3: Services provided by the accounting firm

Services provided	Participant number											
	1	2	3	4	5	6	7	8	9	10	11	12
Financial statement and reporting	x	x	-	x	x	x	x	x	x	x	x	x
Tax compliance and GST	x	x	-	x	x	x	x	x	x	x	x	x
Business setup and structuring	x	x	-	x	x	x	x	x	x	x	x	x
Book-keeping	x	x	-	x	x	x	-	x	x	x	x	x
Cash flow and budgeting	-	x	-	x	x	x	x	x	x	-	x	-
Registered Office services	x	x	-	x	x	x	x	x	x	x	x	-
Due diligence reports	-	x	-	-	-	x	x	-	-	-	x	-
Forensic accounting	-	-	x	-	-	-	x	-	-	-	-	-
Financial planning	-	x	-	-	x	x	-	x	x	-	x	-
Auditing	x	x	-	-	-	x	x	-	x	-	-	-
Other – SMSF	-	x	-	x	-	-	x	-	-	-	-	-
Other – Finance and legal	-	-	-	-	-	-	-	-	-	-	x	-
Other – Management and KPI	-	-	-	-	x	-	-	-	-	-	-	-
Other – Insolvency and restructure	-	-	x	-	-	-	-	-	-	-	-	-

Indicates the service is provided by the respondent

A discussion of the detailed survey and interview results as they relate to the technical and generic skills required by an Australian SMA firm is next.

IV RESULTS

A Desired technical graduate attributes

1 Interview: Technical skills

SMA firm participants were interviewed to discuss the technical attributes they desire for a graduate accountant commencing with their firm. Whilst many themes emerged, participants typically indicated financial statements, accounting software, and taxation skills (each of which is discussed below) as important for graduates.

(a) Financial statements

Over 91 per cent (n=11) of participants discussed the ability to prepare and interpret financial statements, making financial statements as the most prominent technical attribute identified, in front of taxation (n=10, 83 per cent). Participants commonly referred to the main services their firm provides in referring to what technical skills are required, and included discussions surrounding the preparation of financial statements, which also referred to the understanding of 'basic accounting' or 'debits and credits' necessary to achieve this:

The core knowledge in a lot of firms in business services is doing people's financial statements and tax returns (P4).

Definitely a deep understanding of accounting principles, so the debits and credits, the nature of the transactions, and the underlying transactions that take place in accounting systems (P5).

The ability to interpret the financial information contained in the financial statements was noted as significant, including the capacity to understand and break down the financials of a company, and to understand how they are comprised in terms of accounting treatment, including debits and credits. Participants commonly referred to the main services their firm provides in referring to what technical skills are required:

We expect if you are calling yourself an accountant then you should at least understand how to work the financial statements of a business and also reverse engineer that process (P3).

Interpreting financial statements and having a more thorough understanding of profit and loss, balance sheet, general journal entries (P2).

(b) Accounting package software

Given the desirability of financial statement preparation skills, familiarity with the accounting software used by many clients to record their financial information is also required. Accounting software is often used to obtain the client's financial information for use in preparing or interpreting financial statements and information due to the

popularity of business accounting software, as well as the proposed Australian Taxation Office (ATO) electronic small business reporting (SBR) requirements:

Xero is very popular software now ... MYOB desktop software is definitely still rampant in the SME business arena (P5).

However, it was stated that knowing one accounting software package will assist in understanding and learning another one, with participants identifying 'small business accounting software like Xero, MYOB, or Quickbooks' (P6) as commonly used. Two-thirds of participants included knowledge of accounting software packages as a required skill (n=8), listing MYOB, Xero and Quickbooks as currently used accounting software packages. The popularity of accounting software used by small business typically requires one 'to be able to get on there and print profit and loss reports, look into a general ledger and see what's happened' (P1) in using the information to prepare financial statements.

(c) Taxation and taxation software

Over 83 per cent of participants identified basic taxation knowledge as required with the emphasis on 'people being able to actually do a tax return' (P8) or 'confidently fill out a tax return' (P2), along with focusing on the skills for 'current software that the industry uses, particularly for tax' (P10), so that they can 'complete a very basic tax return' (P11) or are 'able to complete a tax return from day one' (P4). It was also acknowledged that 'technical skills such as knowing the basics of the tax system' (P12) are desirable.

It was noted that 'graduates start with individual tax returns and concepts' (P5) before advancing to more complex situations, and that 'being able to use the software would be a plus', so that graduates can 'go into various tax programs and complete a basic tax return' (P12). The tax software was identified as another technical skill that is 'very important, which we don't get anyone out of university having it, is the current software that the industry uses, particularly for tax' (P10), as well as desirable: 'to have some sort of working knowledge of that is certainly advantageous' (P1).

(d) Additional technical attributes

Minor themes that were raised included the desirability for graduates to possess skills for preparing spreadsheets in Excel, along with double-entry book-keeping. This overlaps with the previous requirements relating to financial statements and accounting software (including debits and credits). Whilst a graduate is unlikely to be responsible for data entry and book-keeping as such, they may still be required to 'use programs like MYOB and Quickbooks and be able to process transactions in those' (P12). One participant explained this as:

If a business doesn't have financial statements, they (the graduate) can go through the double-entry book-keeping, so they need to understand how that works to be able to break it down (P3).

It is argued that book-keeping knowledge is useful for interpretation purposes, as it will be important for the graduate to understand what happens in the background to be able to interpret the resulting data:

Spreadsheets were recognised as a useful tool in data analysis and commonly used by accounting firms, and it was noted that it is important that business software like Excel is understood (P3).

One technical attribute identified as not critical for a work-ready graduate was the knowledge of accounting standards, indicating that this will not be part of the graduate's immediate employment within a typical SMA firm, and may only be needed for a graduate in a more specialised role:

A highly advanced knowledge of the accounting standards is probably not all that necessary in a firm with a client base such as ours, with the kind of reports that need to be produced (P5).

You don't need to know that much about financial accounting standards ... as long as you disclose them for special purpose accounts ... Where you've got an audit practice, even though the partner usually handles it, unless you have an audit section we won't need to be reading the AASB's to find out if we are keeping up with the regulations for reporting (P4).

It was recognised that for most SME accounting firms preparing financial statements, 'our software already produces the reports that we provide to our clients' (P1), and that:

We are not preparing accounts for audit or anything, all we do are basic note disclosures which are already programmed into the accounting software so the standards aren't really necessary ... If you were doing auditing they would be, but an SME where you are doing tax preparation, and financial statements that are management accounts, you wouldn't need the standards (P12).

This highlights how the specific nature of SMA firms means that the technical skills required can be different to a large firm.

2 *Survey: Technical skills*

Participants undertaking the survey were informed that each question refers to a specific graduate attribute and requires the statement to be considered in the context of a graduate commencing within their SMA firm. A summary of responses pertaining to technical skills is shown in Table 4, and generic skills in Table 5 in the following section. Each column includes the number of responses for each selection and skill, with the final column including a weighted average score (WA), which is calculated by allocating the values to each participant's response in relation to each skill.⁶⁷ Due to the small sample size it cannot be definitively concluded that a skill showing a higher WA score will be preferred over one with a lower score.⁶⁸

⁶⁷ The values shown are used to determine the WA score for each skill: a WA score of 7.0 would indicate all respondents very strongly agree with the statement, whilst a score of 1.0 would show all respondents very strongly disagree (Very Strongly Disagree (1); Strongly Disagree (2); Disagree (3); Neutral (4); Agree (5); Strongly Agree (6); Very Strongly Agree (7)).

⁶⁸ L Douglas Ried, 'Using Likert-type and Ipsative/Forced Choice Items in Sequence to Generate a Preference' (2014) 10 *Research in Social and Administrative Pharmacy* 598.

Table 4: Survey: Technical skills

Technical skill	Very Strongly Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Very Strongly Agree	WA score (1–7)
Financial statement preparation	0	0	0	2	1	3	6	6.08
Spreadsheets/book-keeping	0	0	0	1	2	3	6	6.08
Taxation	0	0	0	2	2	2	6	6.00
Accounting industry software	0	0	0	1	2	6	3	5.92
Accounting intern/work experience	0	0	0	3	5	2	2	5.25
Business law	0	0	1	2	6	2	1	5.00
Accounting research	1	0	0	3	4	2	2	4.92
Taxation planning	0	0	2	5	1	2	2	4.75
Accounting standards and IFRS	1	0	0	3	7	0	1	4.58
Audit	0	0	0	8	3	0	1	4.50
Weighted average all responses								5.31

Consistent with the interviews, the top technical skills required by a work-ready graduate of a SMA firm were financial statement preparation (6.08), spreadsheets/book-keeping (6.08), taxation (6.0), and accounting industry software (5.92). This supports that a core understanding of tax principles is highly desirable for a graduate to be work-ready when commencing with a SMA firm (although it should be noted there were two neutral responses). Interestingly, the more advanced concept of ‘Tax Planning’ was not as desired for a work-ready graduate (4.75). This could reflect that a graduate at the commencement of their career is more likely to be involved in ‘compliance’ work rather than strategic tax ‘advisory’ work. It may be that as their career advances then more advanced tax planning knowledge could be required.

The second group of skills involved accounting intern/work experience (5.25), business law (5.0), accounting research (4.92), and taxation planning (4.75), and the third group of skills were accounting standards and International Financial Reporting Standards (IFRS) (4.58) and audit (4.50).

The survey data supports the interview findings, with financial statement preparation achieving the equal highest WA score of 6.08, confirming that it is a skill most participants strongly agree is required for graduates. The significance of Excel and spreadsheets is also noted, also achieving an equal highest WA score of 6.08.

Survey results support the interview findings, with a WA of 6.00 for taxation, which is also in the highest scoring group, indicating a strong agreement overall that taxation is a required skill for a graduate.

Accounting software received a high scoring WA of 5.92. Taxation software was not separately noted; however the interview showed that participants presumed this as a component of taxation skills due to the prominence of electronic preparation and reporting.

Accounting standards and IFRS were indicated as one of the less critical technical attributes, receiving a WA score of 4.58. Along with audit (WA = 4.50), this was in the lowest scoring group. This supports the argument that SMA firms do not consider accounting standards a requisite technical skill for a commencing graduate, noting also that accounting standard application will typically be linked to audit skill.

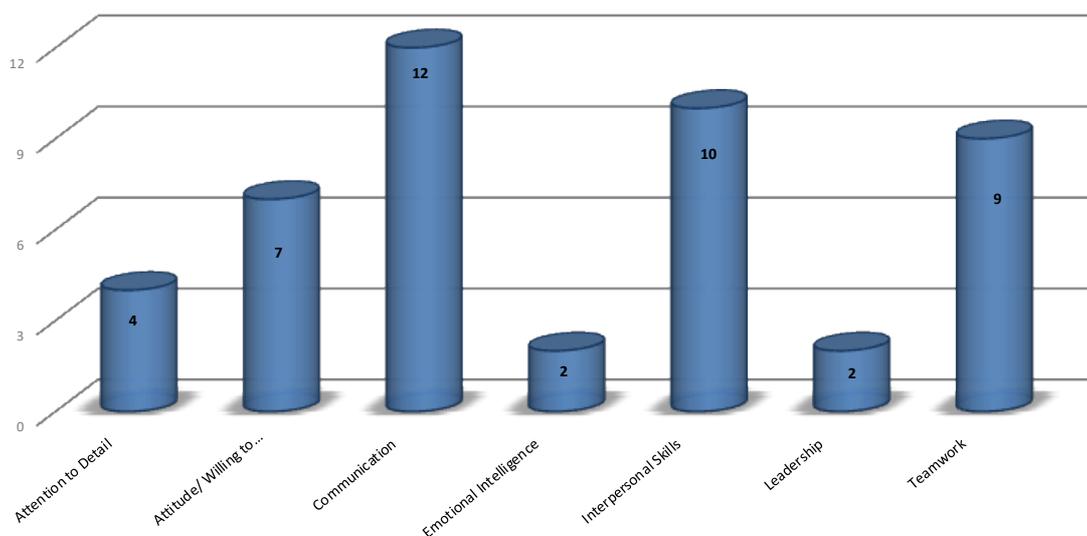
Overall, it appears that tax, financial statement preparation and software knowledge are the top technical skills required for work-ready SMA graduates. The generic skill requirements of a graduate commencing at a SMA firm are considered next.

B Desired generic graduate attributes

1 Interview: Generic skills

Participants were also asked to consider the generic attributes they find desirable for a graduate accountant. Generic skills include communication skills, leadership, teamwork and interpersonal skills. Figure 2 shows the seven most frequently noted generic attributes discussed by participants during the interview process. The responses highlighted the different methods, and contexts for the overwhelmingly desirable communication skills, with some discussions notably overlapping with other generic skills. The attributes shown in Figure 2 are considered below.

Figure 2: Desirable generic attributes for an ideal SMA firm graduate accountant



(a) Communication

Communication skills were found to be perceptively broad, including verbal and written communication as well as listening skills. The desired communication skills may relate to interactions with clients, as well as colleagues and senior staff within the firm. When interview participants were asked what specific generic attributes, they desire in an ideal graduate within their SMA firm, 100 per cent of participants (n=12) included communication skills.

Written communication skills were identified as important for the drafting emails or letters to clients, with participants clarifying their concerns regarding spelling, grammar and general coherency, noting that 'if the spelling and grammar are wrong, it is embarrassing' (P12). Employers want a graduate who can 'draft coherent emails and advice ... because some people just don't have the skills' (P4). It is noted that graduates are typically only drafting communications upon commencing employment, with the email usually forwarded to a 'manager for checking' (P12) so the more experienced person can make sure 'they have got those business communication skills and can write things to clients well, and be very clear in what they are asking for' (P7).

Whether clients meet with graduates in a face-to-face situation upon commencement is a practice that is particular to each SMA firm. One participant noted that client meetings and oral communications with clients wouldn't be occurring yet because 'at that level you wouldn't need face-to-face client communication' (P12). However, a different SMA firm participant stated that they 'expect the graduate to be able to talk to clients straight away, so communication skills are really important' (P7). It was also emphasised that the role of the accountant remains very service-focused, requiring graduates to not only be knowledgeable but to be able to communicate that knowledge, noting that 'communication is becoming far more essential, there aren't many roles for people who are just smart' (P4).

Written and oral communication skills also include effective communication, which must be 'worthwhile and useful, so that people don't have to then keep asking questions ... being able to ask an effective question of the client' (P5). Effective communication may require simplicity, where graduates use jargon instead of 'simple English ... explain things clearly and slowly so that the client understands' (P9). Communicating critical information is also essential, being mindful of time management for compliance deadlines, including 'communicating where there is a shift with regards to deadlines or with regards to time, budgets, etc' (P5):

Communication is a really important thing in our game because ultimately we are in the people game, most people can do the stuff we do, most firms can do things and obviously at different standards, but the great skill is communicating what you are doing to the population because they have zero idea and unless you do that, you can't go very far (P7).

(b) Interpersonal skills

Interpersonal skills can include effective listening, knowledge transfer, understanding group dynamics and collaborating with colleagues.⁶⁹ Much of the discussion surrounding interpersonal skills provides overlap with the communication findings, however it was considered separately to highlight the significance of communicating with colleagues in the workplace:

They need to be able to communicate with other people and ask questions (P12).

The administration staff, you need to know how to get along with them very well because they are critical to what you do (P7).

Interpersonal skills were considered critical in relation to a specialist SMA insolvency practice, 'because of the volatility of this type of work, really high communication skills including empathy and the ability to listen' (P3). Another participant highlighted the personal nature of long-standing client relationships within a smaller firm, identifying the desire to uphold their customer interaction ideals, 'we need someone that has patience and respect and passion, because accountancy is something that is very personal' (P9).

(c) Teamwork

Teamwork has been described as contributing expertise to a team of colleagues so that a solution may be collectively ascertained for a common problem within a typical context.⁷⁰ Communication with colleagues was previously discussed within the realm of interpersonal skills, yet contributes to the generic skill of teamwork as it involves 'working in a team and having the right attitude to get along with everyone else' (P12). It is argued that 'if you've got communication skills, you've generally also got the ability to develop teamwork skills because you can communicate' (P8).

Nine participants (75 per cent) acknowledged teamwork as a desirable skill. The major theme arising regarding teamwork is working as a team to achieve client goals, as well as the goals of the SMA firm. As part of a team, a graduate may 'have to answer the phone, or fill the photocopy paper ... there will be mundane, routine, boring tasks that they will have to do as part of learning the ropes' (P2), but everybody needs to work together. In achieving the best possible outcome, it was noted 'we've got thirty people here with thirty different perspectives and knowledge levels' (P7) to assist with efficiency. Similarly:

In terms of being efficient, in terms of sharing knowledge, in terms of finding better ways to do things, it is important that people are willing to be open and share where they've had troubles or be able to share where they've had wins so that everyone can learn or win from it (P5).

Teamwork is extremely important, we don't have people who are all about themselves, we just have teamwork and everyone works together ... our little firm is like a family,

⁶⁹ Daff, De Lange and Jackling, above n 50.

⁷⁰ Bayerlein and Timpson, above n 1.

we're not family but we work together ... common goal to do well for the client and everybody contributes (P9).

(d) Attitude and willingness to learn

A good attitude, a willingness to learn, and career enthusiasm and motivation were considered together for this study. A desire for graduates to exhibit the right attitude, motivation or enthusiasm toward their career, or willingness to learn was discussed by seven participants. Comments included a desire for respectful and professional graduates in the early stage of their career, by 'having that attitude and keeping in perspective as to where they sit as far as their career goes and their development' (P2); 'they need to be respectful of others, and realise that they need to learn and need to be patient before moving forward' (P12). In conjunction, the willingness to learn can be revealed with the correct attitude:

You need someone that is willing to do the work and start at a lower level and not have attitude about it. They are on the lower income and they are going to do the lower type of work, and they need to suck it up (P12).

It is important that graduates respect their position, but this does not mean they should be stagnant in progressing. A motivated graduate who is enthusiastic about developing their career is also desirable, 'if you've got the self-drive to learn in a short period of time then you'll go places' (P7). One participant explains, 'we look for someone that has the ability and enthusiasm to bring their career forward' (P8) so that the graduate may be developed into a future senior employee. Additionally, it is recognised that 'aptitude, like initiative, in general is huge and as an employer you appreciate it when they have it' (P1).

(e) Emotional intelligence

Emotional intelligence (EI) was discussed as being desirable for a SMA firm graduate, with one participant stating, 'emotional intelligence is just as critical if not slightly more important than technical ability' (P2). It was claimed that 'it is very difficult to teach emotional intelligence' (P8), arguably because it is so broadly defined. Daff et al, describes EI as comprising four broad competencies: self-awareness, self-management, social awareness, and relationship management, each of which consists of further skills including (but not limited to) self-confidence, adaptability, initiative, empathy, leadership and teamwork.⁷¹ However, only two interview participants (n=2) recognised EI as desirable, a comparatively low response given the prominence of EI in the literature.⁷²

The low discussion rate of EI by participants during interviews may be attributed to its broad definition, which encompasses other skills that have already received attention. Self-management, teamwork and adaptability have been discussed in previous sections, along with interpersonal skills, which are recognised as another broad skill with overlapping features.⁷³ Despite limited discussions under these broad headings, this demonstrates support for graduates to display EI as:

⁷¹ Daff, De Lange and Jackling, above n 50, 632, Figure 2.

⁷² Ibid; De Villiers, above n 46; Samantha Sin, Anna Reid and Alan Jones, 'An Exploration of Students' Conceptions of Accounting Work' (2012) 21(4) *Accounting Education* 323.

⁷³ Sin and McGuigan, above n 12.

They tend to develop more quickly because they are able to get deeper relationships with their workmates and their clients earlier, and that then allows them to explore opportunities and develop and move up the career chain (P8).

(f) Leadership

Leadership was also identified; however, it was discussed in terms of not being required early within a graduate's career:

Leadership is something that is developed through watching other people and through an understanding of where you want to go in your career, which generally is just too early for graduates to have a good understanding of (P8).

2 Survey: Generic skills

Part 3 of the survey explained 'generic attributes' as those that can apply across a broad range of contexts and may be obtained by completing any degree. Participants were asked to select the extent to which they agree or disagree that each skill is needed by a graduate commencing within their SMA firm. The results are set out in Table 5 – the final column includes a WA score, calculated as above and using a single response from all 12 participants.

Table 5: Survey: Generic skills

Generic skill	Very Strongly Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Very Strongly Agree	WA score (1–7)
Oral and written communication	0	0	0	0	3	4	5	6.17
Teamwork	0	0	0	0	3	5	4	6.08
Ethics and professionalism	0	0	0	0	3	6	3	6.00
Self-management	0	0	0	0	4	5	3	5.92
Interpersonal skills	0	0	0	1	2	7	2	5.83
Information technology	0	0	0	0	5	6	1	5.67
Motivation and enthusiasm	0	0	0	1	4	5	2	5.67
Flexibility and adaptability	0	0	0	1	5	4	2	5.58
Creative problem-solving	0	0	0	2	3	6	1	5.50
Leadership	0	1	2	5	4	0	0	4.00
Weighted average all responses								5.64

The analysis indicates that most participants agreed the listed generic attributes are required for a graduate, with leadership skills (4.0) scoring the lowest WA score. Oral and written communication (6.17), teamwork (6.08), and ethics and professionalism (6.00) received the highest group of WA scores. The second group included self-management

(5.92), interpersonal skills (5.83), information technology and motivation and enthusiasm (5.67), flexibility and adaptability (5.58) and creative problem-solving (5.50).

Survey data demonstrates support for oral and written communication as a desired generic attribute, with the highest WA score of 6.17 from a possible 7.00. The discussions demonstrate that communication remains important for many aspects of the graduate's role, however, oral communication is not restricted to just clients, with the skill also important for 'communicating with other staff' (P1), which may be better described as an interpersonal skill.

The survey data supports the notion that 'teamwork is important' (P10), with all responses in agreement, leading to a very high WA score of 6.08. This shows that although 75 per cent of interview participants identified teamwork as a desirable generic attribute, 100 per cent of survey responses support it as a requisite quality in a work-ready graduate.

Interpersonal skills also received a high level of support, scoring a WA of 5.83. This provides support for concluding that interpersonal skills are also considered one of the most desirable generic attributes for graduates within a SMA firm.

Self-management, ethics and professionalism, motivation and enthusiasm, and flexibility and adaptability, were listed separately within the survey to enable participants to give individual responses for each. Ethics and professionalism received a WA score of 6.0, followed closely by self-management with 5.92. Motivation and enthusiasm also received a reasonably high score with 5.67, whilst flexibility and adaptability had a WA of 5.58. The weighted average scores ranging from 5.58 to 6.0 indicate that these are generally perceived as skills required by a work-ready graduate in a SMA firm.

Leadership received the lowest WA score across all 20 technical and generic skills listed in the survey with 4.0. This corresponds with the statement noting that 'leadership doesn't matter because that can be developed along the way' (P6), where it is recognised as a good skill to have but it is not required in the early career stages.

C Technical or generic: Which is more important to SMA firms?

1 Interview: Comparison

Upon recognising the desirable technical and generic skills for a graduate within their SMA firm, participants were asked to compare the two sets of skills to identify if one is generally considered more important. Two-thirds (66.6 per cent) identified both groups of skills as essential, noting equal importance:

They are both as important as each other, I think you need the whole combination of having the technical skills but also being able to communicate and get along with other people is as important (P12).

They are equally important, you can be the most lovely, hard-working, good communicator but if you don't know accounting and tax then you are not useful to us (P7).

It was argued that whilst both are important, emphasising one group over the other will depend upon the employment role: 'it is really 50-50, I mean the best result is a broad range of skills across both of those areas but it depends on the role' (P5). A lack of

graduate employment opportunities may also highlight the symbiotic nature of the two types of skills and why it can be artificial to discern between them:

I think it is very important for a graduate to demonstrate both, generic skills are more important for a graduate but the technical skills will give them an advantage in getting employed (P6).

If somebody has completed a degree, I would expect that they have completed it very well ... I can't teach traits but I can teach knowledge, so for me the personal attributes are much more important than the academic ones (P9).

Yap et al identified a shifting focus on generic skills due to a presumption that technical skills will already be adequate.⁷⁴ Whilst both are necessary, participants identified that generic skills would take priority if skills were lacking due to the difficulty of teaching generic skills compared to teaching technical skills:

If I had to choose one it would be the interpersonal skills because I can always teach them how to read a balance sheet (P3).

I can teach them software but I cannot teach them how to work in a team and how to communicate (P10).

This raises an interesting question of how generic skills can be developed if it is perceived by some SMA firms that it is easier to teach technical skills compared to generic skills. This could represent a skill or confidence (or time) constraint with the SMA participants themselves. This could support the notion that, for SMA firms (compared to larger firms), generic skills may be more important than technical skills, due to the capacity and resource constraints on being able to develop generic skills.

2 Survey: Comparison

The survey data presented in Table 6 provides an overall comparison between generic skills and technical skills required by SMA firms. The median values of the weighted averages are calculated for each attribute across all 12 survey responses, resulting in a technical median WA score of 5.13, and a generic median WA score of 5.75. This observation may be used to demonstrate a higher level of agreement across the entire class of generic skills when compared to the class of technical skills.

Table 6: Comparison of technical vs generic skills

Technical skills	WA	Generic skills	WA
Financial statement preparation	6.08	Oral and written communication	6.17
Spreadsheets/book-keeping	6.08	Teamwork	6.08
Taxation	6.00	Ethics and professionalism	6.00
Accounting industry software	5.92	Self-management	5.92

⁷⁴ Yap, Ryan and Yong, above n 44.

Accounting internship/work experience	5.25	Interpersonal skills	5.83
Median WA technical skills	5.13	Median WA generic skills	5.75
Business law	5.00	Information technology	5.67
Accounting research	4.92	Motivation and enthusiasm	5.67
Taxation planning	4.75	Flexibility and adaptability	5.58
Accounting standards and IFRS	4.58	Creative problem-solving	5.50
Audit	4.50	Leadership	4.00
Mean of individual weighted averages	5.31	Mean of individual weighted averages	5.64

The mean WA for technical skills was calculated as 5.31, which demonstrates a reasonable level of agreement when considered against the scoring range of 1.0 (very strongly disagree) up to 7.0 (very strongly agree). In comparison, the mean WA score of the generic skills was higher at 5.64, which may indicate that there is a higher overall level of agreement for SMA firms for the need for generic skills. However, it is argued that employers may already assume the presence of technical skills as a result of completing the accounting undergraduate degree, and subsequently place more emphasis on the generic skills, which may be reflected here and could be the difference in the graduate succeeding in the workplace.

D Technical or generic: Does firm size really matter?

After discussing whether technical or generic skills are more important for a graduate commencing within a SMA firm, an additional question was posed to establish the significance of the working environment context. Participants were asked if they believe a large firm would provide a different preference for desirable skills compared to their SMA firm. Responses varied; however, common themes developed with some arguing a different outcome would arise whilst others suggested no difference.

1 Generalist or specialist employment role

Several participants distinguished the technical skill requirements for SMA firms, noting the broader range of knowledge and technical skills that are needed for a broader range of work typically conducted by the SMA firm. Alternatively, it was stated by the participants that a larger firm may involve a narrower range of technical skills but a more in-depth knowledge may be required: 'the bigger the firm, the more emphasis is put on their academic record, and technical skills and technical expertise' (P1); such that a higher level of technical skills and knowledge may be preferred when compared to the SMA firm conducting a wide array of non-specialist services:

A firm our size we are exposed to a lot broader range of work and it's important that we are able to wear a bunch of different hats ... We are filling more general positions so we would need more generally skilled candidates (P5).

It was also recognised that certain technical attributes will not be required for non-SMA firm graduates, highlighting the different opportunities presented by large accounting firms that will 'look to fill specific technical roles' (P5):

If you go and work at KPMG then you will probably need to know the accounting standards ... you'll do a lot of study around consolidations and tax effect accounting (P7).

Large firms are looking for someone to work in a specific area and they would be more interested in the technical skills (P11).

When you are bigger you can put someone in a specialist area and they can deal with repetitive tasks, but when you're smaller, you need more of a generalist that's good at everything (P3).

Overall, this would tend to suggest that graduates of a SMA firm need a broader knowledge base compared to those who commence with a larger firm.

2 *Office environment*

It is suggested that a large firm will not require graduates to interact as closely with colleagues, whereas in the office environment of a 'smaller firm you've got a huge emphasis on the cultural aspect. Will they fit in? Are they the right person for the job?' (P1). Further concerns may develop where a SMA firm provides graduates with the opportunity for interaction with clients sooner than in a large firm that includes more senior staff. The query, 'am I going to be able to let them talk to people?' (P1) will arise where the smaller number of staff requires the graduate to commence seeing clients earlier, recognising:

A major thing is people skills so they just kind of fit ... with the smaller firm, they need to be a bit more interactive with clients (P10).

When you are in a larger firm you are less likely to speak to the client base within the first three years, whereas with us, we need you to be speaking to people. We basically give you a list of clients to look after and expect you to do everything for those clients so you really need to communicate from day one (P7).

Given that client interaction could occur at an earlier date for a graduate at a SMA firm this would tend to support the notion that communication skills could be more critical (or at least the context different) for them compared to a graduate commencing with a larger firm.

3 *No distinction*

Several participants stated that a consistent desire for interpersonal skills is expected, 'in a large firm you still have small groups of people in teams, but there are just more teams' (P12). It was also suggested that the graduate requirements will be comparable, as 'they are pretty much going to want a 50-50 combination of technical and generic skills and for them being job-ready would be the same as the smaller firms' (P2). In relation to generic skill requirements, it was suggested there is no difference for these:

I don't believe size will really affect the expectation ... maybe large firms will require higher performance or more work experience on their resume but they will still come back to the basics and be expecting those generic skills (P6).

Overall it does appear there is some difference in the skills required by graduates if commencing with a SMA firm compared to a large one. This particularly appears with the notions of needing a broader knowledge base (including a greater need to understand tax and to be able to use tax software), with less importance on accounting standards. Also, a graduate at a SMA firm is more likely to need to be able to effectively communicate at an earlier stage with clients rather than just colleagues. Additionally, SMA firms may give a greater preference to generic skills compared to technical skills, if for no other reason than having less capacity and confidence in being able to improve graduates' generic skills. Of course, given the sample size, these initial observations could be the basis of a larger survey.

E Should graduates be work-ready?

In addressing the possible insufficiency of skills in graduates, interview participants were asked whether graduates should be work-ready or whether on-the-job training is sufficient. Whilst most participants recognised that there is a necessary element of on-the-job training, they agreed that it usually pertains to the systems and processes of the firm. Three-quarters (75 per cent) of participants noted the university as responsible for preparing a graduate as work-ready, although the employer and the graduate are also considered responsible to a varying extent.

The training provided to graduates upon commencement was also investigated, with all participants noting the immediate provision of a taxation training programme (internal or external) with the exception of one participant whose specialist insolvency firm does not provide taxation services. Participant firms without an internal training programme typically use services provided by the National Taxation and Accountants Association, the Tax Institute, or a new employee programme run by the CAANZ or CPA Australia to give their graduates the taxation skills necessary to perform in their roles. This training cost is incurred by the employer, and demonstrates a requirement for more suitable taxation skills for graduates seeking employment within SMA firms. This practice of providing additional 'tax' training to SMA graduates as they commence would provide further support of how important technical tax knowledge is for graduates commencing with a SMA firm. Additionally, it raises concerns about the current adequacy of the tertiary education accounting graduates are receiving in their undergraduate accounting degrees.

Given the findings and the current challenges facing the accounting industry (such as outsourcing and technology), recommendations are provided in the next section.

V RECOMMENDATIONS

As observed by Juchau and Neale:

Designers, mindful of the economic significance of tax and the growth of work for tax practitioners, have incentives to keep their accounting degrees relevant to a major domain of accounting work and therefore attractive to career-oriented under-graduates.

This, in part, gives designers an economic and competitive justification for ensuring taxation is available in their degree courses.⁷⁵

We argue that universities should be particularly proactive if they consider that their accounting graduates are more likely to gain employment with SMA firms. As Pan and Perera argue accounting degrees can't just simply align with accreditation guidelines,⁷⁶ universities must be proactive to ensure the appropriate skill and knowledge development of graduates given their likely employment outcomes. With this in mind a number of recommendations are formulated given the results.

Participants identified a lack of technical skills in current graduates, which are usually implemented after employment is commenced, consuming the resources of the SMA firm employer. In order to address this, the university curricula could be investigated and adapted to provide graduates with the opportunity to develop these skills where they seek to pursue employment with a SMA firm. Particularly, accounting software and taxation software skills are recognised as desirable yet lacking from graduates, even though they are identified as necessary for the typical introductory graduate work performed. It is argued that the desirability for software knowledge is implied as part of taxation skills due to the prominence of electronic preparation and lodgements for accounting firms, SME or other taxpayers. Interview participants noted that immediate taxation training was typically necessary for graduates, with some questioning why this couldn't be implemented at the undergraduate stage. With the high proportion of domestic undergraduates being employed by SMA firms, consideration should be given to offering non-compulsory courses that address the inadequacy of taxation skills in the SMA firm context. This may ultimately increase employability and decrease the incentive for SMA firms to find alternative and more cost-effective solutions, such as outsourcing.

Accounting accreditation may need to be altered to encourage universities to change the course offerings for taxation, as accreditation is a large driver for curriculum change.⁷⁷ CAANZ currently requires the completion of a compulsory taxation course for accreditation. Until recently, CPA Australia only required that a taxation course is made available to students, but from mid-2018 CPA Australia now requires a tax course to be completed as part of an undergraduate accounting degree. It can be argued that two tax courses should be required, mirroring an accreditation requirement from some 30 years ago.⁷⁸ Alternatively, it is suggested that content within the taxation course be adjusted to reflect the inclusion of current taxation software and the possible introduction of case study assessment requirements involving authentic assessment.⁷⁹

Communication and interpersonal skills were also identified as required, yet the levels of these skills are typically identified as not sufficient. It appears that the practical application has not been entrenched, with graduates lacking the ability to draft

⁷⁵ Juchau and Neale, above n 32, 33.

⁷⁶ Pan and Perera, above n 30.

⁷⁷ Brett Freudenberg and Dale Boccabella, 'Changing Use of Business Structures: Have University Business Law Teachers Failed to Reflect This in Their Teaching?' (2014) 9(1) *Journal of the Australasian Tax Teachers Association* 80.

⁷⁸ Freudenberg, above n 37.

⁷⁹ Liz van Acker and Janis Bailey, 'Embedding Graduate Skills in Capstone Courses' (2011) 7(4) *Asian Social Science* 69.

appropriately written client communications, or effectively engage with clients and colleagues. In addition, the generic skills of teamwork, good attitude, and willingness to learn were acknowledged as necessary for a work-ready graduate. Whilst these generic skills may be within the university curricula, it is recommended that their current presence is investigated to determine a more effective means of enhancing these skills. It is acknowledged that Work Integrated Learning (WIL) can improve written and oral communication skills, interpersonal skills, and teamwork⁸⁰ and any proposed recommendation could incorporate a form of WIL, which can assist in improving these skills.

It is suggested that there should be greater awareness of the importance of all communication skills to both academics and students in the accounting industry. Academics should be encouraged to provide more opportunities for students to develop their written and verbal communication skills, with ample opportunity to enhance these skills throughout their degree. The adoption of authentic assessment pieces such as client interviews, business letters of advice and presentations could provide many opportunities on campus during the undergraduate degree to enhance these critical skills. By remaining aware of the central role that communication plays, students may be encouraged to take greater opportunity to develop these skills.

Suggestions by participants included the implementation of more practical course work within the curricula, or a WIL programme, referring to on-campus or workplace learning experiences that combine theory with practice, and require collaboration between the accounting firm participants and educational institutions.⁸¹ However, typical WIL programmes can prove very resource intensive for the employer,⁸² and are often undertaken by only a minority of students. Due to the high resources typically incurred by participants, it is suggested that a viable WIL alternative should be offered to graduates during the final stages of the undergraduate programme such that it can be undertaken by students tending toward SMA firm employment.

In consultation with SMA firm employers, it is suggested that an on-campus workplace simulation may be developed that teaches and enhances the technical skills for business software, taxation and taxation software, whilst also providing the opportunity to develop the generic skills of communication, teamwork and interpersonal skills.⁸³ The introduction of a simulated WIL programme could reduce the overall SMA firm resources expended, which in turn may see graduate employment rates maintained. It could involve authentic assessment using constructed client case studies, which is shown to facilitate higher order thinking, improve communication and critical thinking, and promote

⁸⁰ Brett Freudenberg, Mark Brimble and Craig Cameron, 'WIL and Generic Skill Development: The Development of Business Students' Generic Skills through Work-Integrated Learning' (2011) 12(2) *Asia-Pacific Journal of Cooperative Education* 79.

⁸¹ Denise Jackson, 'The Contribution of Work-Integrated Learning to Undergraduate Employability Skill Outcomes' (2013) 14(2) *Asia-Pacific Journal of Cooperative Education* 99.

⁸² Riccardo Natoli, Beverley Jackling, Friederika Kaider and Colin Clark, 'Mapping WIL Activities in the Curriculum to Develop Graduate Capabilities: A Case Study in Accounting' (2013) 14(2) *Asia-Pacific Journal of Cooperative Education* 75.

⁸³ Nava Subramaniam and Brett Freudenberg, 'Preparing Accounting Students for Success in the Professional Environment: Enhancing Self-efficacy through a Work Integrated Learning Programme' (2007) 8(1) *Asia-Pacific Journal of Cooperative Education* 77.

knowledge transfer to the workplace setting.⁸⁴ The workplace simulation could be added as an elective course toward the end of an undergraduate accounting degree, or offered as a full-fee four-week intensive course after completion of the final university semester and prior to commencing graduate employment. It is argued that this may alleviate employer concerns by providing improved work-ready graduates to SMA firms.

VI LIMITATIONS OF RESEARCH AND FUTURE RESEARCH

The scope of this study is limited to SMA firm employers with no comparative research being undertaken concerning larger or government accounting employment contexts. A restricted geographical scope exists due to the preference of face-to-face interview strategies, involving willing participants operating within the Gold Coast–Brisbane region (Queensland). Additionally, it was not possible to test for a non-response bias.

Regard must also be had to the potential biases of the researcher, in ensuring that the design protocol does not allow any bias to influence the face-to-face interview data obtained. This was addressed by ensuring the researcher was conscious of maintaining an open mind and remaining receptive to all information presented,⁸⁵ along with compiling verbatim transcriptions upon completion of each interview.

The research indicates that SMA firm employers are not willing to employ graduates without some level of the desired generic skills such as communication, teamwork, and interpersonal skills. Further research could be used to investigate how well these are embedded during the accounting undergraduate degree, and to provide alternative ways to enhance these skills through practical application to a SMA firm environment. Additionally, future research could consider effective ways of integrating software knowledge and skills into the accounting curriculum.

VII CONCLUSION

The required skill for a graduate to obtain employment is a vexed question. In the accounting context a number of prior studies have analysed what accounting graduates need. However, many of these prior studies did not focus on these attributes from the perspective of SMA firms, even though they can account for 40 per cent of graduate employment. It was argued that the SMA firm perspective could be different to other sectors. First, this article outlined the literature in terms of technical and generic skills, what this means and their desirability for graduates. Then the research design and method was provided, which included interviews and a short survey of SMA firms. The results indicated that the desired technical skills of accounting software, taxation knowledge and taxation software, and double-entry book-keeping are lacking or insufficient in graduates. Indeed, it seemed that tax knowledge was an important part of the technical skills required by graduates of SMA firms. In addition, the generic skills of

⁸⁴ Susan Kossman, 'Authentic Assessment for RN Students: Writing Case Studies and Teaching Projects' (2005) 44(2) *Journal of Nursing Education* 96.

⁸⁵ Anthony J Berry and David T Otley, 'Case-Based Research in Accounting' in C Humphrey and B Lee (eds), *The Real Life Guide to Accounting Research: A Behind-the-Scenes View of Using Qualitative Research Methods* (Elsevier Science, 2004) 231–55.

communication, teamwork, good attitude and interpersonal skills are also recognised as assisting to make the graduate work-ready in the SMA firm environment. In a competitive tertiary sector a number of suggestions were proposed to develop these skills, which included the introduction of a simulated WIL programme for graduates seeking employment within a SMA firm, or further development of current university curricula.

Given the importance of SMA firms with graduate recruitment it is critical that regard is given to the requirements of employers if the issue of employability is to be addressed. The increasing incidence of outsourcing typical graduate work, together with the decline in sufficiently skilled graduates, is a serious issue that must be addressed by change. With a better understanding we can better equip accounting graduates, which can assist the sector to address the challenges that it faces, and make the most of the opportunities it presents.

REFERENCES

A Articles/Books/Reports

- Ahadiat, Nas and Rose M Martin, 'Attributes, Preparations and Skills Accounting Professionals Seek in College Graduates for Entry-Level Positions vs. Promotion' (2015) 8(1) *Journal of Business and Accounting* 179
- Albrecht, W Steve and Robert Sack, *Accounting Education: Charting the Course through a Perilous Future* (AAA, 2000)
- Barrie, Simon, 'A Conceptual Framework for the Teaching and Learning of Generic Graduate Attributes' (2006) 32(4) *Studies in Higher Education* 439
- Bayerlein, Leopold and Mel Timpson, 'Do Accredited Undergraduate Accounting Programmes in Australia Meet the Needs and Expectations of the Accounting Profession?' (2017) 59(3) *Education + Training* 305
- Berry, Anthony J and David T Otle, 'Case-Based Research in Accounting' in C Humphrey and B Lee (eds), *The Real Life Guide to Accounting Research: A Behind-the-Scenes View of Using Qualitative Research Methods* (Elsevier Science, 2004) 231-55
- Birkett, William P, 'The Demand for, and Supply of Taxation Education: A Delphi Study' (Task Force for Accounting Education in Australia, sponsored by the Australian Society of Accountants, the Institute of Chartered Accountants in Australia with the Accounting Association of Australia and New Zealand, Melbourne, 1989)
- Bishop, Daniel, 'Context, Agency and Professional Workplace Learning: Trainee Accountants in Large and Small Practices' (2017) 59(5) *Education + Training* 516
- Bowden, John, Gail Hart, Bruce King, Keith Trigwell and Owen Watts, 'Generic Capabilities of ATN University Graduates' (Department of Education, Australian Government, Training and Youth Affairs, 2000)
- Bui, Binh and Brenda Porter, 'The Expectation-Performance Gap in Accounting Education: An Exploratory Study' (2010) 19(1-2) *Accounting Education: An International Journal* 23
- Bunney, Diane, Elaine Sharplin and Christine Howitt, 'Generic Skills for Graduate Accountants: The Bigger Picture, A Social and Economic Imperative in the New

- Knowledge Economy' (2015) 34(2) *Higher Education Research & Development* 256
- Chaplin, Sally, 'Accounting Education and the Prerequisite Skills of Accounting Graduates: Are Accounting Firms Moving the Boundaries?' (2017) 27(1) *Australian Accounting Review* 61
- CPA Australia, *Changes to Advanced Taxation* <<https://www.cpaaustralia.com.au/cpa-program/cpa-program-candidates/your-enrolment/advanced-taxation/changes-to-advanced-taxation>>
- CPA Australia and Institute of Chartered Accountants in Australia, 'Professional Accreditation Guidelines for Australian Accounting Degrees' (2012) <<http://www.cpaaustralia.com.au/cps/rde/xbcr/cpa-site/international-accreditation-guidelines.pdf>>
- Daff, Lyn, Paul de Lange and Beverley Jackling, 'A Comparison of Generic Skills and Emotional Intelligence in Accounting Education' (2012) 27(3) *American Accounting Association* 627
- Dale, Jason, 'Preparing Business Leaders and Accountants for Future Financial Leadership' in Elaine Evans, Roger Burritt and James Guthrie (eds), *Future Proofing the Profession: Preparing Business Leaders and Finance Professionals for 2025* (RMIT and Chartered Accountants ANZ, 2015) 88
- De la Harpe, Barbara and Christina David, 'Major Influences on the Teaching and Assessment of Graduate Attributes' (2012) 31(4) *Higher Education Research & Development* 493
- De Villiers, R, 'The Incorporation of Soft Skills into Accounting Curricula: Preparing Accounting Graduates for Their Unpredictable Futures' (2010) 18(2) *Meditari Accountancy Research* 1
- Department of Employment, Australian Government, *Labour Market Research – Accountants Australia June Quarter 2017* (Labour Market Research and Analysis Branch, 2017) <https://docs.employment.gov.au/system/files/doc/other/ausaccountants_1.pdf>
- Devonport, F, 'The Place of Taxation in a Commerce Degree' (Proceedings of the AAUTA Convention, University of Newcastle, August 1968)
- Edwards, Rosalind and Janet Holland, *What Is Qualitative Interviewing?* (A&C Black, 2013)
- Ember, Melvin and Carol R Ember, 'Testing Theory and Why the "Units of Analysis" Problem Is Not a Problem' (2000) 39(4) *Ethnology* 349
- Freeman, Mark and Paul Wells, 'Reducing the Expectation Gap: Using Successful Early Career Graduates to Identify the Capabilities that Count' in Elaine Evans, Roger Burritt and James Guthrie (eds), *Future Proofing the Profession: Preparing Business Leaders and Finance Professionals for 2025* (RMIT and Chartered Accountants ANZ, 2015) 67–78.
- Freudenberg, Brett, 'Conference Dinner Address' (Presented at the Annual ATTA Conference, ATTA Newsletter, February 2018)

<<https://www.business.unsw.edu.au/About-Site/Schools-Site/Taxation-Business-Law-Site/AttaNews/ATTA-News-Feb-2018.pdf>>

- Freudenberg, Brett and Dale Boccabella, 'Changing Use of Business Structures: Have University Business Law Teachers Failed to Reflect This in Their Teaching?' (2014) 9(1) *Journal of the Australasian Tax Teachers Association* 80
- Freudenberg, Brett, Mark Brimble and Craig Cameron, 'WIL and Generic Skill Development: The Development of Business Students' Generic Skills through Work-Integrated Learning' (2011) 12(2) *Asia-Pacific Journal of Cooperative Education* 79
- Graduate Careers Australia, 'Graduate Outlook 2015' in *The Report of the 2015 Graduate Outlook Survey: Perspectives on Graduate Recruitment* (2014) <www.graduatecareers.com.au>
- Hancock, Phil, Bryan Howieson, Marie Kavanagh, Jenny Kent, Irene Tempone and Naomi Segal, 'Accounting for the Future: More Than Numbers' (Final Report, Australian Learning and Teaching Council, 2009) vol 1
- Howieson, Bryan, Phil Hancock, Naomi Segal, Marie Kavanagh, Irene Tempone and Jenny Kent, 'Who Should Teach What? Australian Perceptions of the Roles of Universities and Practice in the Education of Professional Accountants' (2014) 32 *Journal of Accounting Education* 259–75
- Jackling, Beverley and Paul De Lange, 'Do Accounting Graduates' Skills Meet the Expectations of Employers? A Matter of Convergence or Divergence' (2009) 18(4–5) *Accounting Education* 369
- Jackling, Beverley and Kim Watty, 'Generic Skills' (2010) 19(1–2) *Accounting Education* 1
- Jackson, Denise, 'The Contribution of Work-Integrated Learning to Undergraduate Employability Skill Outcomes' (2013) 14(2) *Asia-Pacific Journal of Cooperative Education* 99
- Jackson, Denise and Elaine Chapman, 'Non-Technical Competencies in Undergraduate Business Degree Programs: Australian and UK Perspectives' (2012) 37(5) *Studies in Higher Education* 541
- Jackson, Denise, Ruth Sibson and Linda Riebe, 'Delivering Work-Ready Business Graduates – Keeping Our Promises and Evaluating Our Performance' (2013) 4(1) *Journal of Teaching and Learning for Graduate Employability* 2
- Juchau, Roger and Ray Neale, 'Taxation in Australian Undergraduate Accounting Courses: A Review and Case Note' (2001) 10(1) *Accounting Education* 27
- Kavanagh, Marie and Lyndal Drennan, 'What Skills and Attributes Does an Accounting Graduate Need?' (2008) 48 *Accounting and Finance* 279
- Kossmann, Susan, 'Authentic Assessment for RN Students: Writing Case Studies and Teaching Projects' (2005) 44(2) *Journal of Nursing Education* 96
- Low, Mary, Vida Botes, David De La Rue and Jackie Allen, 'Accounting Employers' Expectations – The Ideal Accounting Graduates' (2016) 10(1) *e-Journal of Business Education & Scholarship of Teaching* 36

- McKerchar, Margaret, *Design and Conduct of Research in Tax, Law and Accounting* (Thomas Reuters, 2010)
- Martin, Fiona, 'A History of the Australasian Tax Teachers Association' (2013) 8(1) *Journal of the Australasian Tax Teachers Association* 31
- Natoli, Riccardo, Beverley Jackling, Friederika Kaider and Colin Clark, 'Mapping WIL Activities in the Curriculum to Develop Graduate Capabilities: A Case Study in Accounting' (2013) 14(2) *Asia-Pacific Journal of Cooperative Education* 75
- Osmani, Mohamad, Vishanth Weerakkody, Nitham Hindi, Rajab Al-Esmail, Tilla Eldabi, Kawaljeet Kapoor and Zahir Irani, 'Identifying the Trends and Impact of Graduate Attributes on Employability: A Literature Review' (2015) 21(4) *Tertiary Education and Management* 367
- Pan, Peipei and Hector Perera, 'Market Relevance of University Accounting Programs: Evidence from Australia' (2012) 36 *Accounting Forum* 91
- Pan, Shan L and Barney Tan, 'Demystifying Case Research: A Structured – Pragmatic – Situational (SPS) Approach to Conducting Case Studies' (2011) 21 *Information and Organisation* 161
- Rebele, James and E Kent St Pierre, 'Stagnation in Accounting Education Research' (2015) 33(2) *Journal of Accounting Education* 128
- Ried, L Douglas, 'Using Likert-type and Ipsative/Forced Choice Items in Sequence to Generate a Preference' (2014) 10 *Research in Social and Administrative Pharmacy* 598
- Saunders, Mark N K, Philip Lewis and Adrian Thornhill, *Research Methods for Business Students* (Pearson, 7th ed, 2015)
- Sin, Samantha and Nicholas McGuigan, 'Fit for Purpose: A Framework for Developing and Assessing Complex Graduate Attributes in a Changing Higher Education Environment' (2013) 22(6) *Accounting Education* 522
- Sin, Samantha, Anna Reid and Alan Jones, 'An Exploration of Students' Conceptions of Accounting Work' (2012) 21(4) *Accounting Education* 323
- Sithole, Seedwell T M, 'Quality in Accounting Graduates: Employer Expectations of the Graduate Skills in the Bachelor of Accounting Degree' (2015) 11(22) *European Scientific Journal* 165
- Smith, Calvin, Sonia Ferns and Leoni S Russell, 'Conceptualising and Measuring "Employability" – Lessons from a National OLT Project' (ACEN National Conference, Australian Collaborative Education Network Limited, Gold Coast, 2014) 1
- Subramaniam, Nava and Brett Freudenberg, 'Preparing Accounting Students for Success in the Professional Environment: Enhancing Self-efficacy through a Work Integrated Learning Programme' (2007) 8(1) *Asia-Pacific Journal of Cooperative Education* 77
- Tax Practitioners Board, Australian Government, *Qualifications and Experience for Tax Agents* (5 March 2018) <<https://www.tpb.gov.au/qualifications-and-experience-tax-agents>>

- Tempone, Irene, Marie Kavanagh, Naomi Segal, Phil Hancock, Bryan Howieson and Jenny Kent, 'Desirable Generic Attributes for Accounting Graduates into the Twenty-First Century: The Views of Employers' (2012) 25(1) *Accounting Research Journal* 41
- Towers-Clarke, Jane, 'Undergraduate Accounting Students: Prepared for the Workplace?' (2015) 8(1) *Journal of International Education in Business* 37
- van Acker, Liz and Janis Bailey, 'Embedding Graduate Skills in Capstone Courses' (2011) 7(4) *Asian Social Science* 69
- Yaftian, Ali, Sohelia Mirshekary and Dessalegn Mihret, 'Learning Commercial Computerised Accounting Programmes: Perceptions and Motivations' (2017) 30(3) *Accounting Research Journal* 312
- Yap, Christine, Suzanne Ryan and Jackie Yong, 'Challenges Facing Professional Accounting Education in a Commercialised Education Sector' (2014) 23 *Accounting Education* 562

Copyright of Journal of the Australasian Tax Teachers Association is the property of Australasian Tax Teachers Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.