

Institution: University of Dundee
Unit of Assessment: UoA19 Business and Management Studies
Title of case study: Embedding Employability Skills in Accounting Education
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Research conducted at the University of Dundee has led to the development of a number of teaching interventions that have enhanced the employability skills of graduates in Dundee and beyond. Embedding innovative learning and teaching resources into the curriculum has given accounting and finance students across the UK early exposure to real world data as well as critical problem solving and decision making experience. This has created graduates who are able to deal with a rapidly changing working environment. Involving a wide range of stakeholders including not only academics and students but also finance experts and accounting practitioners in the research and design of the interventions has benefited the students who have been able to learn from the shared wisdom of professional experts while at university; and in return the profession has profited from more rounded and effective graduates.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The Higher Education Academy (HEA) included Employability as one of its “enhancement themes” in 2004-05; this continues to be a priority area within the current theme of Graduates for the 21st Century. Thus, there is a need for academics to look beyond teaching to a narrow, subject-specific focus and to instead look to broaden the curriculum to include a greater range of skills. The underpinning research in this case has examined how employability skill acquisition and transferable skills can be built into finance and accounting teaching within UK Higher Education.</p> <p>The first strand of research explored innovative ways of engaging student participation and sought to embed practical experience of the financial software being used in industry within undergraduate study. This was significant as, at the time (late 1990s), there was a lack of adequate tools available in universities to analyse financial information and there was pressure from the financial institutions for qualified staff [3.1; 3.2]. The research was funded by the Scottish Higher Education Funding Council (SHEFC) and the Stewart Ivory Foundation, a Scottish charity devoted to furthering financial education in tertiary education within Scotland. The research focused on specific strategies such as portfolio management strategies regarding the trade-off between risk and return; the impact of transaction costs; the benefits of investing in emerging markets. A software teaching resource, FINESSE (Finance Education in a Scalable Software Environment), for portfolio management was produced which integrated educational research with practical application. FINESSE involves students in setting up and managing a portfolio of equities and is supported by Reuters, the financial information provider, who supply a real time data feed of prices from the London Stock Exchange. Students create and manage their own portfolio of equities online in groups. The software allows students to benefit from financial data used by industry, encourages the application of knowledge about equity valuation as well as investment strategies and gives them the chance to experience the potential benefits of team work, a key factor of the assessment of that work being the agreed rationale for the portfolio selection decision. [3.1; 3.2].</p> <p>The second strand of the research examined the skills that practitioners, academics and students regard as important for trainee auditors to possess for a successful auditing career [3.3, 3.4]. Funded by the Institute of Chartered Accountants of Scotland (ICAS), the aim was to create an audit teaching and learning resource to simulate audit experience and facilitate the development of transferable skills as recommended by the Dearing Report (1997). Within the profession the need for a wide range of skills, or capabilities, as well as a sound knowledge base is increasingly seen as important. ACCA noted in their report on the changing role of accountants <i>Closing the Value Gap</i> (2012) that softer or generic skills are often under-developed. Drawing on educational research and Kolb’s experiential learning cycle, a web based case-study of a fictitious company (SCAM) was developed to simulate a real-life audit scenario; enable group working; facilitate the use and development of a range of transferable skills; and encourage a consideration of the wider</p>

business context. These have all been raised as concerns by the professional bodies [5.5].

The most recent strand of research, which extended the research team into Italy, Uganda and Saudi Arabia, is directed towards understanding the current state of accounting education in various jurisdictions [3.5; 3.6]. Professional accounting education pronouncements stipulate the knowledge, skills and attitudes that it is necessary for an individual to possess in order to act as a competent accountant and auditor, including finance and accounting. In particular, the research explores how the International Education Standards for Professional Accountants (IES) competencies and capabilities have been incorporated into accounting programmes in universities, the profession, and other relevant bodies, operating in different countries; and to determine the most appropriate teaching methods to inculcate the desired competencies and capabilities, as espoused by the IESs [3.5; 3.6]. This work was funded by the Association of Chartered Certified Accountants (ACCA) and commissioned by the International Association of Accounting Education Research (IAAER). IAAER is a global organisation set up to promote excellence in accounting education and research worldwide; the IAAER participates in education standard setting through representation on the International Accounting Education Standards Board (IAESB) of the International Federation of Accountants (IFAC).

Key Researchers: Dr Louise Crawford from 2006; Prof. Christine Helliard from 1990 - 2012 (now at University of South Australia); Dr Rosa Michaelson from 1990; Dr Elizabeth Monk from 2000; Prof. David Power from 1987; and Ms Lorna Stevenson from 2000 - 2012 (now at University of St Andrews).

3. References to the research (indicative maximum of six references)

- 3.1 Helliard, C.V., Michaelson, R., Power, D.M., Sinclair, C.D. (2000) 'Using a Portfolio Management Game (Finesse) to Teach Finance', *Accounting Education*, 9 (1), 37-51. DOI: 10.1080/096392800413645
- 3.2 R. Michaelson, C.V.Helliard, D. M. Power, C.D.Sinclair and C.Allison, (2003), 'Group work and the web: Finesse and Tags', in D.Hawridge and R.Kaye (eds), *Learning and Teaching for Business: Case Studies of Successful Innovation*, Kogan Page, London, pp122-137.
- 3.3 C.V. Helliard, E.A. Monk and L.A. Stevenson (2009) 'The Development of Trainee Auditors' skills in Tertiary Education', *International Journal of Auditing*, 13(3), pp. 185-202 DOI: 10.1111/j.1099-1123.2009.00385
- 3.4 L.Crawford, C.V.Helliard and E.A.Monk (2011). 'Generic Skills in Audit Education', *Accounting Education: an International Journal* 20(2), p115-131. DOI: 10.1080/09639284.2011.557487
- 3.5 L. Crawford, K. Falgi, C. Helliard, E Monk, C. Teodori, M.Veneziani and S. Wanyama (2010) IES Compliance and the knowledge, skills and values of IES 2, 3 and 4, *The International Association for Accounting Education & Research*: http://www.iaaer.org/research_grants/files/Final_report_Helliard%5B1%5D.pdf
- 3.6 Crawford, L., Helliard, C.V., Monk, E.A. and Venezian, M. (Accepted 2013, in press) International Accounting Education Standards Board: Organisational legitimacy within the field of professional accounting education. *Accounting Forum*.

Research Grants

1999 – 2001: "Tutor and Group Support (TAGS)", Scottish Higher Education Funding Council (SHEFC), £333,000, 27 months. Grant Holders: C. Allison (St Andrews), D.M. Power (Dundee). Co-investigators: C.V. Helliard, R. Michaelson, C.D. Sinclair.

2001 – 2003: "Teaching Auditing in an Internet Environment", ICAS, £8,500, 42 months. C.V. Helliard, E.A.Monk and L.A.Stevenson

2003 – 2005: "Disseminating and maintaining Finesse", Stewart-Ivory Foundation, £62,000 (10/03) 2 years. C.V. Helliard, R. Michaelson, D.M. Power, and C. Allison

2006-2007: "Finesse: Continuation", Stewart-Ivory Foundation, £30,000, 1 year. C.V. Helliard, D.M. Power and C. Allison (University of St Andrews)

2008-2010: "IES Compliance and the Knowledge, Skills and Values of IESs 2, 3, and 4",

IAAER/ACCA Grant Program for Research on International Accounting Education Standards - \$25,000. L. Crawford, K. Falgi, C. Helliar, M. Mina, E Monk, C. Teodori, M.Veneziani, S. Wanyama.

4. Details of the impact (indicative maximum 750 words)

Pathways to Impact:

Research by academics at the University of Dundee School of Business on employability skill acquisition within Finance and Accounting teaching has led to the development of several outputs, including: (1) FINESSE (an online software teaching resource); (2) SCAM (a web based teaching case study) and (3) practitioner/policy reports relating to the incorporation of IES competencies and capabilities within educational programmes. All three outputs have acted as vehicles to deliver wider impact. These impacts are now discussed in turn.

FINESSE – Influencing Financial Education Delivery Across the UK

FINESSE has been used by a number of UK universities, including the University of Aberdeen, University of Glasgow, Robert Gordon University, University of Essex and Edinburgh Napier University. 1593 individuals were registered on, and used, the system between 2008 and 2013 [5.1]. In a recent letter a Professor who used Finesse while working at [text removed for publication] between 1998 and 2012, which as an institution accounted for a third of these registrations, said:

"I became one of the earlier adopters of Finesse, and over time it developed into a substantial and integral part of the [text removed for publication] for both undergraduate and postgraduate students... I believe Finesse gave students a really good insight into the functioning of capital markets, and by incorporating transactions costs as well as multiple currencies in more recent versions of the programme, it was an excellent tool for students to learn about and critically evaluate portfolio theory, the problems of trading too much, the merit of diversification, and aspects of the efficient markets theory... Student feedback on Finesse was consistently positive." [5.2]

Having provided a significant part of the funding for the *FINESSE* project, the Stewart Ivory Foundation continued to champion the resultant software as part of an initiative to publicise financial education to finance practitioners, before the Foundation itself was wound-up in 2011. Since that time the Stewart Ivory organisation has continued to promote financial awareness among senior school pupils, independently of any government bodies.

FINESSE also continues to be in annual use at our own institution where the benefits of real-world experience are valued by both our current students and by graduates. For example, a former student who is now a fund manager [text removed for publication] said in a recent letter that *FINESSE* offered "an introduction to fund management, aiding in the decision that I took to seek a role in financial services" based on fruitful interlinking of concepts and simulation [5.3].

SCAM – Improving Professional Practice

ICAS funded the project to develop an audit teaching resource which would enable university students to put their technical knowledge of auditing into practice. On completion of the project they published a monograph on the development of *SCAM* which promoted use of the resultant online case study, *SCAM* [5.4]. A review published in the *British Accounting Review* recommended the book and associated software to those teaching undergraduate auditing [5.5], and it featured in the professional and national press (CA Magazine, Accountancy Age, both Apr. 2007; The Herald, 16 Apr. 2007, [5.6]. Since the publication of the monograph a number of professional accountants and auditors have expressed interest in this package and requested access [5.6]. The package was used in our institution for a number of years and students have found this to be helpful in their future careers: "The audit work that I have done to date has incorporated various elements of the *SCAM* project." [5.7]

IAESB – Informing Professional Standards

The third strand of the research is on-going. The scope of the four projects, one of which was undertaken by the team at Dundee University, commissioned by the IAAER and funded by ACCA in 2008, was to help the IAESB by “providing evidence on the acceptance, implementation, and impact of accounting education standards throughout the world” [5.8]. The final report from the project has been published on IAAER’s website [5.8] and welcomed by the IAESB as the research was “intended to inform the standard setting agenda” [5.9]; the IAESB press release on the research (published in April 2011) indicated that recommendations from the commissioned research are being used to inform the current revisions of the International Education Standards to help the IAESB meet its goal of “establishing and promoting adherence to high-quality professional standards.” In the press release, the IAAER President: said “some academic research is criticized for its lack of immediate applicability, but these projects provide direct and timely information that is useful for the setting of international education standards [5.9]. Similarly, the IAESB Chair, noted: “The results of the four projects have provided the IAESB with valuable insight for our standard-setting work and our current project, revision of the International Education Standards.” [5.9]

The IES project reported back to IAAER, representatives of the IAESB and ACCA throughout the term of the grant and this allowed for a focused exchange of information with the IES standard setter [3.5]. The research team were also invited to present at the 11th World Congress of Accounting Educators and Researchers in November 2010 in Singapore to an international audience of academics, standard setters and policy makers.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- 5.1:** Email from University of St Andrews FINESSE manager stating the number of individuals who have logged into the programme between 2008 and 2013 and the domain they are in.
- 5.2:** Letter from former Professor of Finance [text removed for publication] confirming that he had found the tool to be useful and beneficial to students learning.
- 5.3:** Statement from a Fund Manager [text removed for publication], a former student who has used the FINESSE software, confirming benefits and impact that he believes resulted in part from using FINESSE during his studies.
- 5.4:** ICAS Research Committee Foreword to ICAS monograph: "The development of an audit learning package: SCAM" (C.V.Helliar, E.A.Monk, L.A.Stevenson and C. Allison, 2007).
- 5.5:** Book review of the ICAS monograph: The development of an audit learning package: SCAM - N. Marriott, *British Accounting Review*, (2007) 39 (3), p267-268. doi:10.1016/j.bar.2007.07.002
- 5.6:** Dissemination and uptake summary from ICAS confirming regular web activity and logins from professional accountants and auditors, and details of press coverage.
- 5.7:** Statement from recent graduate, a user of the web based case-study (SCAM) and now a senior practitioner, confirming the benefits to professional accounting practice that have occurred from using the tool.
- 5.8:** http://www.iaaer.org/research_grants/2010_IAESB.htm. IAAER website linking to the research on educational standards.
- 5.9:** IAESB Press Release: ‘IAESB Welcomes Completion of Research Intended To Inform Its Standard-Setting Agenda’ 11 April, 2011. Available from: <http://www.ifac.org/news-events/2011-04/iaesb-welcomes-completion-research-intended-inform-its-standard-setting-agenda>. This press release confirms that the research findings are being used by IAESB to inform the current revisions of the International Education Standards.