Institution: University of South Wales

Unit of Assessment: C19

a. Context

The University of South Wales Business School (USW-BS) has built an international reputation in a number of key research areas including; enterprise, social innovation and supply chain management. The school interacts with a range of businesses and government policy departments both within Wales and the UK and has undertaken work with an international reach in Australia and Germany etc. Research in to enterprise and social innovation is led by David **Pickernell** and Christopher **Miller** whilst the supply chain and operations management research work is led by Andrew **Thomas**. Work produced in these two research areas has generated a significant number of international journal publications and these staff also engage in a range of dissemination activities which include but are not limited to; workshops, media presentations, master class lectures and professional body prestige lectures. The main non-academic user groups and beneficiaries of research from the Unit include; technically updating practitioners, policy makers, newspapers (e.g Western Mail, through the Top 300 programme) and broadcast media (e.g Radio Cymru, BBC Wales). The primary impacts of the Unit's research fall into the categories of social and economic innovation, education and society and, business performance improvement with secondary impacts being made on policy making and feasibility studies for major governmental initiatives (**Pickernell** and **Thomas**).

Much of this research has international reach (eg **Pickernell** and **Miller's** collaborations in Australia, **Thomas's** collaborations in France and Germany – I*PROMS). However, a key focus of the Unit is developing leading edge research that impacts directly on Wales and the UK. The two cases outlined in this section are based on the long standing enterprise and entrepreneurship research agenda within the Unit. Case study 1 (developed by **Pickernell and Miller**) focuses on Enterprise Promotion with a particular emphasis on the Federation of Small Business Case Study which examined the barriers to growth for small firms whilst Case study 2 addresses the work undertaken by the **Pickernell** *et al* in developing the Enterprising University/Enterprise Education projects. Both case studies detail the research undertaken and the impact that each project has made on its stakeholders.

The main mechanisms for encouraging impact achievement have been via direct and in-depth linkages with the beneficiaries. For case study 1, the Federation of Small Business (FSB) case, there have been very direct relationships with the FSB's policy writers with impact being evidenced in various forms, particularly FSB policy documents. In the case of the E-college case Study 2), the links have been with the learners themselves, many of whom have subsequently started or developed their own businesses. The follow-on projects have also linked directly with learners, both in the UK, for example, female entrepreneurs, and internationally. More widely the enterprising university agenda that the E-college Case Study can be seen to have catalysed, has also led to, for example, an A4B Business Angels project, with direct links and collaborations with government agencies (Venture Wales) and Business Angels themselves. Both Case Studies demonstrate important reach and significance involving engagement with a range of stakeholders including policy makers, entrepreneurs, funders and agencies.

b. Approach to impact

Since 2008 the Unit has run series of best practice master classes in the areas of procurement and supply chain and has led a number of governmental research programmes that has resulted in the production of reports that have led to policy formulation in Wales. **Thomas's** work on the development of the Welsh manufacturing Strategy and **Pickenell** and **Miller's** work with the FSB (case study 1) for instance outlines the impact of the work undertaken by the Unit. The E-college Case Study supported a range of staff (particularly in terms of online development) from which an extensive infrastructure to support the project (and hence entrepreneurship) was developed. Staff engaged with stakeholders through developing workshops and focus group activity to obtain key research data.

For the FSB Case Study, the support mechanism to generate impact came from the FSB themselves, in terms of policy documents, press releases, etc. **Pickernell** and **Miller** as well as the wider research team engaged with the stakeholders of this case through undertaking focus groups and interview surveys in order to elicit key information from the key stakeholder groups.

The main financial support for staff has been administered through the Unit's Research Awards Scheme. This scheme allocates funds for research purposes, including: buying out staff from teaching duties to conduct research; funding research conferences which focuses upon producing work that leads to publications and the development of future research; covering the cost of conference attendance which might result in research outcomes or improved research capacity; funding seminar series for practitioners, policy makers and researchers; providing funds for one-off events linking internal staff and external contacts; and providing financial support to fund research sabbaticals of one or two terms. The Business school also assists in the support of researchers by modifying staff workloads and recruiting replacement staff to cover for the teaching for those bought out for research. The Unit supports staff to achieve impact via Research Assistants and project researchers. For instance, **Pickernell, Miller** and **Thomas** are supported by a Research Assistant and a number project researchers / officers employed through their projects (WAVE and InSCAPe). These officers work in partnership with the research staff to maintain relationships and contact with non-academic collaborators, support the development of impact elements of research and, offer organisational assistance in hosting events that are focused towards achieving impact through exchange and debate with users from outside the University.

The research activities of the unit are aided by an array of resources providing institutional support and helpful expertise for the furtherance of its work. The Research and European Offices help administer grant applications, including large European bids. **Pickernell** and **Thomas** have recently benefited from this help in their recent successful European grant applications for WAVE and InSCAPe. The University has provided financial resources through QR allocation and through central funding of PhD scholarships and staff posts. As a result of these funds, the university granted **Thomas** funding to support the employment of a Research Assistant in 2013-2014. The recent developments of the Research Institutes has also assisted the Unit in consolidating a firm research culture at university level as well as the infrastructure provided for research development by the Research Institute Directors. The University also has an up-to-date computing system which allows for high level security and data storage at a level required of many government agencies and funding bodies. This computer system is critical in the functioning of our KTP programme with EADS Cassidian Cyber where security clearance is required for all work developed in this project .
In addition, the University enables staff to achieve impact through the University's Commercial Services Office and Research Office which support KTP and Knowledge Exchange projects, and Welsh-Government funded Strategic Insight Programme that facilitate staff exchange between HE and industry professionals in diverse organisations (See REF 5).

c. Strategy and plans

In 2008, following the previous RAE, the Unit designed a comprehensive research strategy that focussed specifically upon the enhancement of the quality and quantity of research as well as the reach and significance of its impact. This included several methods for enhancing impact. This included; the establishment of staff and student seminar programmes for bringing together practitioners, policy makers, and researchers including informal sessions for staff to discuss their research in progress. The development of a series of workshops specifically for industry practitioners with the aim of imparting and disseminating the latest research findings and also to provide a forum to discuss the mechanisms of how to implement new research within the business environment.

In the last year, the overall structure of research has changed at the University in several ways as a result of the establishment of four new Research Institutes headed by Research Directors. The main aim of Research Institutes is to create sustainable research centres by focusing on external research grant acquisition, establishing a research appraisal system, and introducing a mentoring scheme. These changes led us to review the UoA research strategy accordingly. Our existing mentoring scheme will be replaced by the generic Research Institute scheme and our strategy for funding research activities will comprise a balanced combination of QR funding and external grant acquisition. This will be enabled through an enhanced Research Office, dedicated research assistants, and linked lectureships with an additional research workload. The best of the old system will remain including: the Research Symposium Scheme, the Research Conference Scheme and the Seminar Series Scheme, all of which have been successful in forging links with policy makers and practitioners and in making our research known to a wider practitioner/policy maker set. Key improvements of the new research system includes the consolidation and growth of a research culture based on high-quality and high-impact research as well an outward facing

website and events that will provide a platform for the research conducted by the research centres attached to the Institute

A concerted policy has been introduced to better publicise and widen access to the research undertaken. **Pickernell** and **Miller,** through the Centre for Enterprise (C4E), now manage a weekly blog that highlights current and future research, it also maintains a daily commentary on Twitter to further publicise its work. **Pickernell, Miller** and **Thomas** are supported in their work by Visiting Professors who liaise regularly with academic/industrial advisors. These advisors provide key academic steering and guidance and the industrial members ensure that the research is both relevant and aligned to the applied research philosophy each centre is committed to achieve. These research staff are now focussed upon the development of a new 5 year strategic plan that will run from 2014 to 2019 (Post REF). The strategic plan outlines the growth trajectories, showing how growth will be achieved and detailing the research funding opportunities that will be targeted and exploited over the next five years.

d. Relationship to case studies

The case studies provide evidence of the high-quality and high impact research undertaken by the staff within the C19 Unit of Assessment. The research outputs achieved from these case studies informs and typifies our strategic approach to providing high impact applied research to a range of industries and sectors. The cases demonstrate the breadth and diversity of the industries, sectors, organisations (as in Case Study 1) and individuals that benefit positively from our research, and the significance our impact holds in enriching the lives of individuals (as in Case Study 2). Case Study 1 provides evidence of how our research, has made an impact on government policy development around funding strategies for small businesses. Case Study 2, evidences how we contributed to Welsh public life through the broad provision of enterprise training and course development which directly impacts on increasing the number of entrepreneurial start-ups in Wales. The underpinning research for both these case studies is ranked as 3* on the ABS Journal ranking.

The two case studies submitted relate to the work of **Pickernell**, and **Miller**. The underpinning research for these was conducted before the current strategy was implemented, but much of its impact has taken place during the more recent period, with support and assistance from the Unit. In particular, the impact of the work undertaken in Case Study 1, research with the Federation for Small Businesses (FSB) has led to further work being developed for other FSB branches in Northern Ireland etc . **Pickernell and Miller's** impact on the E-college system has not only impacted positively on entrepreneurs and small business start-ups but has also been the catalyst for the development of further work based learning and industry research projects that have successfully been obtained by the Business School (WAVE and InSCAPe for example)

The approach to impact is based on staff support through buying out time, providing a research culture through seminars, conferences for practitioners, and enabling research activity through teaching buyouts and institutional administrative support through the Research Office and the School. Both case studies were developed and impact obtained through significant support offered by the Business school to the staff within the Unit. Sympathetic timetabling, release of time from teaching and the provision of small amounts of research funding to assist the team in disseminating and presenting their work in conferences and practitioner events has yielded success for the Unit.

 Pickernell and **Miller's** case studies have resulted in a much closer relationships with both the Federation for Small Business (Case 1) as well as with a large number of small business start up and entrepreneurs in Wales (Case 2) through the network operated through the E -College established by **Pickernell** and **Miller** and linked to the Centre for Enterprise web site. It has also led to research collaborations among staff at the Centre and members of other institutions in Wales including; Munday at Cardiff University, Clifton at Cardiff Metropolitan University and Blackaby at Swansea University.