Cardiff University is pleased to submit evidence to the Enterprise and Business Committee inquiry into Youth Entrepreneurship. Universities play a vital role in helping to enhance enterprise and entrepreneurship activity and have a good track record in providing an environment in which to actively encourage and promote enterprise education, creating business start-up opportunities and helping to develop the workforce of the future. By investing in education and focusing on the skills agenda, producing the right specialist and entrepreneurial skills, we believe that Wales can essentially ‘grow its own’ jobs and provide companies with a highly skilled workforce and higher paid jobs. Investment in high levels of skills supports the promotion of a small, clever country.

Should the Committee require any further information or clarification, we would be pleased to provide this as necessary.

Youth entrepreneurship in context
The University welcomes the Welsh Government commitment to inspiring and supporting youth entrepreneurship across Wales. Specifically, the support and financial resources available to higher education enables the University to provide additional support to students to develop their own enterprise potential through practical experiential learning outside of the curriculum, whatever their future career plans. This activity complements other approaches to and support for enterprise education within Cardiff University.

This submission summarises the experiences of staff at Cardiff University who have been working in enterprise education for a number of years. While some questions are clearly more appropriate for other stakeholders to consider, we have sought to provide responses in the areas where we have experience and capability. The extent to which entrepreneurship education is embedded within the University is described which, in turn, may offer examples of good practice which the Committee might find beneficial.

This submission also considers the impact of the Welsh Government’s Youth Entrepreneurship Strategy (YES) – recognised as one of the key drivers of enterprise education in Wales - and the wider enterprise education agenda within a higher education context. Universities are essential to the development of the skills base for businesses in Wales. Therefore, the focus of this evidence is on the value of enterprise education to students with a wide range of career aspirations as well as to recent graduates considering business start up as a career.

Cardiff University context to response
To date in Academic Year 2012-13 more than 500 Cardiff University students have participated in practical enterprise activities outside of the curriculum with a further 450 students engaged in enterprise education embedded within a range of academic disciplines within the curriculum. More than 50 students have been supported to develop and implement their own business ideas. Cardiff University is ranked first in Wales for the estimated turnover of its graduate start-up businesses, which in 2009-10 totalled >£8.2M

In 2010-11, research identified 114 Cardiff University graduates who had started businesses within two years of graduation. Surveys conducted of a sample of students studying at Cardiff University in 2008 and in 2013 show an increase in the proportion of students interested in starting a business at some point in the future from 26% in 2008 to 36% in 2013. It is therefore important that ongoing support is available to ensure that this increase in intentions is translated into increased entrepreneurial activity.
Enterprise Education in context
Enterprise education in universities has developed and changed focus significantly within the past decade and no longer is the generation of graduate start-up businesses the sole aim. As can be seen from the scale of graduate starts reported in the HEBCI survey\(^1\) there is likely to only be a small, though significant, minority who will go on from university in the short-term and start their own business.

Enterprise education, however, has the broader objective to develop individuals with the skills, confidence and capability to spot an opportunity, identify a solution and put their own ideas into practice. Enterprise education is defined by the QAA\(^2\) as the process of “equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen”. Enterprise education at Cardiff University aims to adopt this approach, not simply supporting venture creation, but providing a supportive culture and helping students develop an innovative mindset.

Inspired, self-confident, talented and enterprising graduates are more likely to establish and lead dynamic new ventures as well as to transform any organisation they join or manage\(^3\). This is of particular importance in a Welsh economy in which SMEs are major employers. In 2009-10 52% of Cardiff University graduates working in Wales with 17% of these employed by Welsh SMEs\(^4\).

How effective is the Welsh Government's approach to promoting youth entrepreneurship?
The main Welsh Government approach to promoting youth entrepreneurship within HE has been through project funding available via YES for activities which promote and support entrepreneurship for students and graduates.

Cardiff University is currently a member of a YES HE/FE Regional Hub led by Cardiff Metropolitan University and prior to this led a regional collaborative project of four universities funded through YES. These successful collaborations have led to the development of a number of enterprise events and opportunities for student peer to peer learning between universities. This approach enables students to experience entrepreneurship from a variety of perspectives outside of their own discipline.

Student-led enterprise activity is a key objective of the Regional Hub. This has enabled students involved to develop key employability and enterprise skills. Peer to peer promotion of enterprise and entrepreneurship has been demonstrated to be an effective way to raise awareness and aspirations.

What is the scale of Welsh Government resource and funding targeted at the promotion of youth entrepreneurship? Is it sufficient?

Funding
Ongoing commitment to any funded initiative and therefore greater sustainability provides the opportunity to link more effectively with other initiatives and activities within the University, adding far greater value. The recent change from one year commitment to projects in HE and FE to a more sustainable three year funding cycle has seen benefits in longer term planning and therefore, the ability to consider activity and the student developmental journey in the longer term. This has been demonstrated successfully in other programmes such as Go Wales which have three year funding cycles.

With the recent announcement that HEFCW’s Innovation and Engagement funding stream will reduce by 50% in 2013/14 and will be removed completely in 2014/15, there is a real benefit to ring-fenced YES funding, which allows these initiatives to continue and grow. To ensure ongoing development and to expand delivery of this activity in HE, continuation of YES funding beyond the current term would be essential.

Resources
Resources developed as part of the wider pan-Wales YES campaign, such as Big Ideas Wales can often be difficult to relate effectively to the HE environment. These resources aim to provide
accessible information to 16 to 25 year olds both within and outside education which, as a very diverse demographic group, can be difficult to achieve.

**What steps can be taken to improve or strengthen support for potential young entrepreneurs in Wales?**

With a majority of the Cardiff University student population coming from outside Wales, a strong incentive is needed to retain graduate entrepreneurs in Wales. There are some real benefits to graduates who choose to start a business in Wales, as opposed to elsewhere in the UK, in particular the tailored support available through the Welsh Government Graduate Start-up Scheme. However, much of the support targeted towards graduates assumes, what is for many, an unrealistic turnover in the early stages. A staged approach with tiered levels of support would enable many more graduate businesses to benefit and therefore to recognise the benefits of remaining in Wales.

**To what extent is entrepreneurship embedded within secondary education, further education and higher education institutions in Wales?**

An excellent example of this in practice is the recently awarded HEFCW Innovation and Engagement Collaborative Fund between Cardiff University and Cardiff Council to drive innovation and enterprise within the City Region. This initiative has two main strands – 1.) the embedding of entrepreneurship across the curricula at Cardiff University to ensure that our graduates are exposed to entrepreneurship (regardless of the discipline of the degree studied), and 2.) the exploitation of basic research through ‘grand challenges’ leading to innovative solutions. Here we see the Council and HEFCW working with the University in this key strategic area.

This project aims to work with academic staff in the building of a more enterprising curriculum, providing practical opportunities for students to develop an entrepreneurial capability which moves beyond knowledge acquisition to a range of intellectual, emotional and social skills that allow for the application of creative ideas and innovations. It can include ideas development, taking the initiative, critical thinking, identifying opportunities, innovation, problem solving, making things happen, networking, communication, strategic thinking and decision making. The curriculum remains subject driven and research-led, with enterprise activity embedded within existing content.

The ultimate objective is to deliver highly skilled graduates to the labour market equipped with the entrepreneurial and innovative skills required to either establish new businesses or drive innovation in existing businesses.

**How does the Welsh Government monitor and evaluate its youth entrepreneurship activities?**

In the context of the YES HE/FE activities, monitoring is conducted quarterly with reporting as a Regional Hub against quantitative targets, mostly concerned with the number of students engaged along with a narrative report. However, within this framework it can be difficult to assess the real impact of these activities on the individuals and more sophisticated longitudinal evaluation of activity may be needed to ensure the impact is truly captured.

As a whole, one of the main KPIs of the YES is the number of business start ups. While this may be the ultimate outcome of this activity, for many, especially graduates, this may be several years into the future. Therefore, there is a need to consider how best to measure the development of an individual’s entrepreneurial capability and self-efficacy towards enterprise, whatever career path they choose to pursue.

Using the expertise available within the HE sector there is an opportunity to consider a more in-depth research tool to understand the development of individuals’ ability and intentions.

**How effective is the Welsh Government’s approach to promoting youth entrepreneurship?**

Within the University sector, YES has a significant impact; however, at Cardiff University this is one aspect of a range of approaches to ensuring students and graduates have access to the entrepreneurial development opportunities and support they need.
Examples of good practice in youth entrepreneurship activities at Cardiff University

Cardiff University makes full use of the range of initiatives that support entrepreneurship within a higher education setting. A number of examples of good practice in YE activities in universities can be identified which demonstrate the three stages of the journey through enterprise education as defined by YES; Engage, Empower and Equip.

Engage

Promoting enterprise to enable students to recognise the value of developing an enterprising skill-set to themselves and their future careers.

Innovation Challenge (partially YES funded; collaborative project since 2012)
The annual Innovation Challenge is a week-long competition in which students develop their enterprise skills by working in teams to identify and pre engage students and offer a practical enterprise experience. In 2012, this project was rolled out to 3 other Welsh HEIs as part of the YES HE/FE regional Hub. Since 2008 more than 400 students have participated in this event which has been recognised as a High Impact Global Entrepreneurship Week event.
http://cardiff.ac.uk/racdv/students/ent-skills/challenge/index.htmlsent ways to create value from a mystery everyday object. The objective of this challenge is to

Empower

Providing practical enterprise learning opportunities

Ignite (YE-funded collaborative project)
Ignite is an intensive four day programme developed with three other local Universities as part of a collaborative YES project and provides opportunities for students to work in multi-disciplinary groups to develop their ideas, build their skills and put their ideas into practice through a 24 hour challenge. Participants also learn from presentations from local entrepreneurs as well as pitching their ideas to a panel of ‘Dragons’ from local businesses and graduate entrepreneurs.
http://www.weareignite.co.uk/

iSolve (funded through various sources including YES, EPSRC and HEFCW I&E Fund)
iSolve brings together inter-disciplinary teams of post graduate students and research staff who use their ingenuity and innovation skills to research and identify commercial opportunities for breakthrough technologies being developed in Cardiff University. To date more than 100 students and staff have participated in iSolve considering commercial opportunities for 16 Cardiff University technologies. The team analysing each of these has received support from a mentor from the local business community.
https://sites.cardiff.ac.uk/cuenterprise/about-2/isolve/

Equip

Supporting young people to create and grow businesses
https://sites.cardiff.ac.uk/cuenterprise/start-up-support/

Enterprise Support Programme (HEFCW –funded)
All-Wales project led by the University of South Wales. The Programme provides guidance, encouragement and support for student and graduate start-ups through an Enterprise Support Officer at Cardiff University. A dedicated individual within this role has enabled the guidance available to be expanded, maintaining engagement with students as they develop their ideas. It will also enable greater ongoing links with alumni.

YES Graduate Start-Up Scheme
The Enterprise Support Programme works closely with the YES Graduate Start-Up Scheme and offers a tailored approach to graduates starting their own businesses as well as to final year students in the development stages. This scheme, which does not appear to have equivalents in the rest of the UK, recognises graduate start ups as having distinct needs in terms of both training
and one-to-one support. This scheme has proved a valuable source of support for Cardiff University graduate start ups.

A home-grown success story: James Taylor – Superstars
James is a Cardiff University Psychology graduate who started his business after graduation in 2005 with support from Cardiff University and the Welsh Government, through the Knowledge Exploitation Fund Entrepreneurship Scholarship (a forerunner of YES). James chose to stay in Wales and establish his business in Cardiff, partially due to the support available to graduate start ups in Wales. Now with a multi-million pound turnover, Superstars provides employment for many graduates of universities in South Wales. James supports the Dynamo programme within YES, and acts as a role model, inspiring young people in Wales to consider starting their own venture.

School of Engineering MSc in partnership with Alacrity
Cardiff University works in partnership with the Alacrity Foundation to develop high calibre engineering specialists. Students are led through an intense programme of research-led teaching, enhanced by entrepreneurial projects with Alacrity and the Cardiff Business School. http://alacrityfoundation.co.uk/

Summary
Implementation of the Youth Entrepreneurship Strategy has supported enterprise education at Cardiff University since 2010, providing resources to develop enterprise education outside of the curriculum.

Universities are hot beds for cultural as well as knowledge exchange and provide highly skilled graduates for the employment market and produce a number of graduate start-up companies. Initiatives that help graduate start-ups in particular should continue to be supported to provide greater sustainability of these activities e.g. the HEFCW-funded Enterprise Support Programme and Graduate Start-Up Scheme, as well as those that provide the ground work of awareness raising and entrepreneurial skills development such as the YES HE/FE Regional Hubs.

Ongoing funding, aligned with other strategies, such as Innovation Wales and the HEFCW Skills and Employability Action Plan is key to the success of this activity. A joined up approach is essential, to ensure that the students and graduates, as beneficiaries of this activity, have a clear journey through the successive levels of support, even when funded through different strategies.

Increasing engagement of students and a trend towards increased numbers of graduate start-ups suggests that the approaches currently being taken are effective. However, there is an opportunity to consider whether there is a need to reassess the evaluation of these programmes and measure supplementary outcomes of YES to reflect the importance to the Welsh economy of entrepreneurial individuals working within existing businesses, rather than purely those starting new ventures. Universities are well placed to provide the necessary expertise and advice in this area.

Excellent foundations have been laid and as set out above there are many examples of good practice, time is now required to review these activities and use them as a foundation to continue to grow and develop future support.