
Case Study

iSolve

Cardiff University

Background

Cardiff University has been delivering an extracurricular programme titled ‘iSolve’ over the past three years. This programme is aimed specifically at postgraduate researchers with the intention of driving the development of transferable enterprise and entrepreneurship skills. It has a central focus on Intellectual Property. The programme accommodates approximately forty participants in each cohort and is delivered twice a year. The programme is non-residential and is boosted by the funding from the Welsh Government and the EPSRC.

iSolve is a nine to ten week programme. It offers postgraduate researchers and postgraduate taught students an opportunity to develop commercial awareness and commercial skills by focussing on the University’s internal intellectual property. The programme begins with a presentation by academic staff on how the University considers Intellectual Property to be a potential income source in terms of spin out companies and other opportunities. iSolve is based around learning in a group environment with input from industry professionals.

The programme is delivered through a series of two hour workshops and lectures each week delivered by industry mentors and guest speakers. These focus primarily on aspects relevant to the commercialisation of the selected IP projects. At the
outset of the programme, participants are divided into interdisciplinary teams with a live IP project and a dedicated industry mentor. On entry to the programme, participants are required to sign a confidentiality agreement (a non disclosure agreement) which is held by the University. Towards the end of the programme they are required to create a report and to make a presentation to external mentors, the Research and Commercial Division of Cardiff University and to internal academic staff. These comprise an assessment of the feasibility of the IP in a commercial environment. Students work under the supervision and support of an industry mentor throughout the course.

Organisational

The Student Enterprise team recognised a potential need for including postgraduate researchers in work on live projects that could create IP for the University. This was driven initially with commercial considerations in mind although the need for more training opportunities for postgraduates was also recognised. "There was a need to support them and to understand more about the IP they are dealing with. The experience of understanding IP is ultimately of a higher level within the PGR community rather than the undergraduate community. We also felt a need to deliver more than an occasional workshop so we wanted to equip postgraduates with transferable enterprise skills which could be useful to their research and skill sets".

The iSolve programme supports the vision, values and desired outcomes of the organisation. As Neil Coles (Enterprise Officer) stated "We want our graduates to possess commercial awareness and knowledge of the commercial environment. They should also have the skills in terms of enterprise and innovation. The iSolve programme is aligned with the University’s innovation and engagement strategy and our employability and enterprise strategy."

Students

The programme is free to postgraduate researchers and postgraduate taught students. iSolve is “truly interdisciplinary” as it attracts postgraduate researchers and
postgraduate taught students from its twenty-eight schools. iSolve attracts a large number of PhD researchers. These are mostly home students whereas many overseas students are enrolled on postgraduate taught programmes. Mr Coles stated: “The programme includes postgraduate researchers and postgraduate taught students. However, it is aimed at postgraduate researchers as they generally work independently. It is about offering students an opportunity to work in a team based environment and to also understand how IP can relate with their individual research to develop their own Intellectual Property. Postgraduate taught students are also allowed to participate in the programme. The reason for this is that they may become postgraduate researchers in the future. However, undergraduates are not allowed to participate as their focus could be quite different”.

Terminology

The Student Enterprise Team felt the need to explain the terms “enterprise” and “entrepreneurship” to the target audience. Mr Coles stated “The terminology depends on the profiles of people in our target audience. For example, when I am talking to Psychology academics about the programme, I would not use the terms “enterprise”, “business” and “entrepreneurship”. I alternatively would talk about ‘making a difference’, as the ethos within psychology is more about enhancing individuals rather than organisations. The message of developing situations or people is warmer and more suited to the psychology mindset. If I went to engineering, I would probably use words like “enterprise”, “commercialisation” and “innovation” as this would be more appealing. Health care would purely be about “innovation”.

The project team do not directly promote the programme as 'enterprise and entrepreneurship skills' but rather with a specific focus on commercialisation of research and exposure to enterprise and commercial thinking through engagement. By doing so, this is reflected in the iSolve training and development programme which promotes enterprise and entrepreneurship in a wider sense whilst being able to attract students from all faculties of the University.
Programme Design

The programme content was designed from an initial training needs analysis. The design of the programme is adapted to some extent to the particular IP projects available. Since the introduction of the iSolve programme, most projects have been based in Medical, Life Sciences, Pharmaceutical and Science based IPs. The programme intends on developing the participants' knowledge in Intellectual Property, team working skills with a range of other softer skills. The exposure to enterprise and commercial thinking is crucial towards the outcome of the project.

The design of the programme is configured and adapted towards the nature of IP projects available. The Project Team considers the post-activity evaluation and feedback in the progressive development of the programme content.

Creating Awareness

The Student Enterprise Team have promoted the programme in Postgraduate information packs, university online notice boards, website (www.cardiff.ac.uk/enterprise), blogs, Blackboard (Learning Central), and emails to school managers to distribute to their Postgraduate community. The programme is also promoted externally through an Annual Report booklet titled "Commercial@:".

"We also try to engage Postgraduate Supervisors but, in the main, supervisors often appear to defer students from taking part. Some students have told us that they were interested but their supervisors guided them towards a focus on their thesis.”.

Participants are initially motivated to iSolve towards their personal and professional development as well as gaining an understanding of commercial IP and therefore, the programme is advertised in an appropriate terminology which would inspire participants towards the usefulness of skills that they would gain from undertaking the programme. The profile of participants is also important. Mr Coles states "The aim is ultimately to have participants in groups representing some part of the twenty-eight Academic Schools at Cardiff University. For example, we wouldn't group all law students together, so usually we include participants from various disciplines in
groups. It also depends on the amount of relevant projects we have which also set the context of the programme design and the way we would promote the programme”.

Staff Resources

The iSolve programme has been designed, administered, and co-ordinated by the Central University Staff (Enterprise Cardiff staff). The Enterprise Cardiff staff create the learning objectives and curriculum. The programme is delivered by industry mentors and guest speakers through a profile of local entrepreneurs, industry professionals as well as the University's commercial division. The Enterprise and Commercial Division attracts many industry specialists and entrepreneurs through its externally affiliated members. Academics within the University are also instrumental in attracting industry professionals through their contacts and networks.

The programme did not require any substantial development of the Enterprise Cardiff staff as most employees have had knowledge and experience in the area of project management and entrepreneurship. However, industry mentors may not have sufficient knowledge in dealing with students but they gain some professional development in this area by participating and experiencing from the programme. According to Mr Coles "It is important for staff co-ordinating such programmes to understand project management and how learning takes place in a university setting and to recognise that there is a difference in terms of learning in a extracurricular environment which is quite different from learning in the curriculum."

The Enterprise Cardiff Centre has recruited members that have knowledge about enterprise and project management but other forms of support should also be available such as engaging in conferences, online web support, and other relevant forms of development activities.

Outcomes

The iSolve programme has been effective in developing the transferable skills stated in its initial aims and objectives. Participants have felt that as a result of attending the
programme, it has helped them professionally as well as with their career development. "We actually had one student who specifically said that they got a job at Cambridge University because of attending this programme. In terms of the IP, it's too early to see any spin outs yet as the programme has been only running for three years. Our Post-Activity assessments are also positive as many students expressed the importance of knowledge gained from the programme".

Supervisors

Supervisor 'buy-in' into the programme is seen as a challenge by the Enterprise team. Mr Coles stated "Supervisors that have become involved in the programme have been positive to its benefits, however the hurdle remains that some supervisors considerations are sceptical due to timeout of traditional research for their student."

Learning Points

- Gain involvement from Industry.
- Create activity which is beneficial to the participant.
- The programme must be creative, exciting and professional.
- The projects need to be of live, good quality, appealing and engaging.
- Allow for discovery learning approach.