

Evaluation report about

ENTREPRENEURSHIP EDUCATION IN *QUEEN'S UNIVERSITY BELFAST*

Belfast. Northern Ireland.



From: *Lasma Licite*
European Funds management

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“What you have achieved is the most innovative and exciting learning environment for enterprise in the UK.”

(Professor Ken O’Neill University of Ulster, winner of the Queens Enterprise Award for Lifetime Achievement.)

„You managed to involve a whole class of 300, the most exciting lecture of my life.”

(Pharmacy student.)

“I found this to be an unforgettable learning experience. I have acquired enterprise skills and can be successful.”

(Nursing student.)

“ The game has enable me to understand enterprise and practise real skills in 2 hours.”

(Agriculture student.)

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INTRODUCTION

Queen's University Belfast was founded in 1845 and holds a unique position in higher education. Queen's is a member of the elite **Russell Group** of UK universities, joining an association of 19 major research-intensive universities that includes Oxford, Cambridge, Bristol, Edinburgh and University College London.

The University has an international reputation for innovative teaching and ground-breaking research and has won four Queen's Anniversary Prizes for Further and Higher Education. In September 2007, The Sunday Times short listed **Queen's for its University of the Year title**.

Queens are doing a lot of innovative things in entrepreneurship education and the most important are described in this research.

Entrepreneurship module ELVIS in Queens University, Belfast, is unique. The primary aim is to embed this entrepreneurship module in the curriculum within all disciplines throughout Queens University. Thus this course will be embedded in disciplines such as nursing, biology, psychology, engineer, food science etc. It perhaps sounds strange that nurses and food science students will study entrepreneurship? The classical meaning of entrepreneurship typically is associated with starting up a business. However, the ELVIS module focuses on the development of core skills like creativity, teamwork, self management, etc. These skills are necessary not only for entrepreneurs but for all people in various specializations. This course focuses on “enterprise for life”.

To better understand the entrepreneurship module ELVIS in Queens University, Belfast (how it works in diverse disciplines, what kind of teaching methods are used, etc.), it is necessary to look at the beginning – how did it start and how this idea appeared. That's why in 1.1.the NICENT(Northern Ireland Centre for Entrepreneurship) Branch is described.

Queen's are also doing a great job in **extra curriculum**. Last year in November they opened an **enterprise employability centre** in the Student Union where students can receive advice about their business ideas. Also there are often different seminars about entrepreneurship issues, competitions, etc. held.

QUBIS is also an important place in Queen's which supports university spinouts. QUBIS is in 1st place in the UK and Ireland in the revenues of spin out companies.

1. ANALYSIS OF DOCUMENTS

1. 1. NICENT AT QUEENS UNIVERSITY, BELFAST

NICENT (The Northern Ireland Centre for Entrepreneurship) was established in 2000 as a partnership between *Queens University* and *The University of Ulster* with the primary **aim of nurturing and promoting the entrepreneurship agenda** within the **SET** (Science, Engineering and Technology) schools and faculties. Funded by the Office of Science and Technology (OST) and Invest Northern Ireland (NI), under the social enterprise challenge the initiative has delivered an innovation and entrepreneurship education to over 15,000 students across the partner institutions in the 7 years since its establishment¹.

In 2006, the *NICENT* team achieved national recognition for leading the way in fostering student enterprise. The higher education sector representative body, Universities UK, cited *NICENT* as “*an exemplar for the promotion of an entrepreneurship culture within higher education in the UK*”².

A key member of the *NICENT* team was **Mr. David Gibson**, Senior Teaching Fellow in Entrepreneurship at Queen's University, Belfast, who became the first recipient of a National Teaching Fellowship for Enterprise in Education in the UK. Since his appointment in January 2003, David has been the lead in **embedding enterprise** within the existing **curriculum in over 52 disciplinary** areas (predominantly within SET) throughout the University. Indeed, Queens University was the only university in the UK to have embedded enterprise within the existing curriculum.

The Queens strategy was based on customizing all teaching materials and the curriculum to ensure that it was as relevant as possible to the students in each subject area. An “*Enterprise for life*” approach was used and it focuses on **developing core enterprise skills** such as creativity, teamwork, negotiation and presentation skills as well as self management. It was felt that these competencies would therefore be equally valuable in working within an organization, running a freelance or portfolio career, or in developing a social enterprise. Consequently, for example nurses were encouraged to become “more innovative and enterprising” nurses and to develop solutions to key problems within the National Health Service.

The focus was also on **innovative pedagogies** and **experiential learning**, with the students reflecting upon their experiences in line with best educational practice.

¹ NICENT Celebration Report 2005-2007, pg. 3

² NICENT Celebration Report 2005-2007, pg. 3

1. 2. ENTREPRENEURSHIP COURSE “ELVIS”

Course Description:

This module is intended to provide students with an insight into entrepreneurship and innovation and to give them a chance to use their enterprise skills to develop the curriculum and resources to inspire pupils within the revised curriculum.

Aim:

To develop graduates with an **innovation and creativity awareness** and an extensive skill base in order to **become more enterprising** in their future career.

Duration of module:

Amount of lessons varies in different disciplines – from 4 to 12 meeting times (2 hours per session).

Learning Outcomes:

This programme provides students with the opportunity to:

- ⇒ Appreciate that enterprise is a life skill relevant to all;
- ⇒ Be more creative and develop innovative ideas;
- ⇒ Develop personal branding and financial strategies to implement the idea;
- ⇒ Negotiate and network with other groups and outside stakeholders;
- ⇒ “Pitch” their project ideas to a panel of educationalists and business people;
- ⇒ Develop reflective skills necessary for entrepreneurial development;
- ⇒ Gain an awareness of the enterprise start up process.

Skills/competences:

David Gibson research revealed **8 competencies** that every successful entrepreneur has and which are also vital to anyone in a corporate or public sector career. Enterprise skills for life/employability are:

- ⇒ selling
- ⇒ negotiating
- ⇒ influencing
- ⇒ planning

- ⇒ team working
- ⇒ communication skills
- ⇒ networking
- ⇒ personal marketing

The focus of his teaching is to show students how to be more enterprising and innovative in whatever context their career might evolve. This approach ensured that enterprise education could be embedded and contextualized within each discipline.

Learning methods:

As previously stated, this module focuses on innovative pedagogies and experiential learning. Innovative teaching methods are largely presented in a '**learning by doing**' style.

Key enablers:

- ⇒ experiential learning (role plays, case studies, small groups);
- ⇒ reflective learning log;
- ⇒ supportive learning environment;
- ⇒ lectures as facilitator (effort is to break down barriers and to encourage students to fully engage with the subject).

Attendance:

As all coursework is completed in groups during class time an attendance of at least 80% is required subject to the Course Directors discretion.

Assignments:

There are 3 pieces of assessment associated with this course. These include:

1. a group project plan of no more than 1000 words which must be submitted at the end of the last teaching day and is worth 50% of the course work mark (*teams assessed on their networking skills and follow-up activity*).
2. further 30% is allocated for the **final "pitch"** of entrepreneurs (*teams are assessed on their ideas and selling skills*).
3. 20% for the completion of a short **reflective learning log** completed individually and submitted online which must be no longer than 500 words.

Presentation:

Students will be required to deliver a 5-10 minutes presentation “pitch” as outlined above at class in teams of 4-6 persons. Presentations will be assessed by the panel and 5 minutes will be allowed for Panel questions.

Team of Enterprise Educators:

⇒ **David Gibson** - Senior Teaching Fellow in Entrepreneurship at Queen's University, Belfast.

⇒ **Aisling Harkin** and **Jonathan Scott** - entrepreneurship teaching fellows who are employed by *NICENT* (Northern Ireland Centre for Entrepreneurship).

⇒ In these lessons there are often visitors from the university who offer advice and give support for students – people from the Business centre, Regional office, etc. Local business, national bodies (National Council for Graduate Entrepreneurship (NCGE), Centre for Excellence in Teaching and Learning (CETLC), SEC), stakeholders, alumni, etc. are also involved because the entrepreneurial ecosystem consists of alumni, extra curriculum, business links and research and all these should be included in curriculum.

Certificate:

The award of the Certificate is dependent upon the completion and passing of all pieces of coursework and maintaining an acceptable attendance record. Certificates are normally provided following graduation. There are a £300 prize for the best group project and “pitch”. Failed elements of coursework can be re-submitted once only.

1.3. QUBIS Ltd

QUBIS Ltd is one of the 1st who initiated spin outs³ in UK and Ireland and according to surveys has ranked in the **1st place in the UK and Ireland in the revenues of spin out companies.**

According to the observer in 2004, it is ranked in 4th place in the UK as **one of the most effective venture spinout groups.** Financially QUBIS Ltd is a Gift Aid Donor to Queens University Belfast.

QUBIS Ltd was established in 1984 as an independent company by The Queen’s University of Belfast to commercialise the University’s research and development activities through the formation of ‘spin-out’ businesses. The University, through QUBIS Ltd, takes an equity holding in a new spin-out venture in return for an investment of cash and/or Intellectual Property. QUBIS Ltd

³ Spin outs – companies which comes out from The Queens University Belfast

major **aim** is to 'pull through' appropriate research and development from the laboratory into the commercial market place.

QUBIS Ltd proactively seeks to identify and evaluate commercially exploitable research and resources from within Queen's University. Management and partners, who have appropriate skills and access to the market place, are then sought. All new ventures are market led and only those with strong feedback from the market place are actually undertaken.

By building up a portfolio of successful investments in QUB technology spin-outs, there will be some welcome by-products and **bonuses** as follows:

- ⇒ Economic development new high-tech businesses, exports and employment, especially of University graduates.
- ⇒ Technology transfer from Queen's to local and national economies.
- ⇒ Enhanced University profile highlighting commercially relevant research at The Queen's University of Belfast.

QUBIS has created 51 companies and earns £74.8 M combined turnover of companies created and in 2008 expect to exceed £89.3M. QUBIS has created a large proportion of the tech companies in Northern Ireland. The most successful companies which QUBIS Ltd has created are:

- ⇒ Amphion Semiconductors Ltd (bought by Conexant Systems Inc June 2004),
- ⇒ Andor Technology PLC (floated in Aim December 2004),
- ⇒ APT Ltd (Audio Processing Technology Ltd),
- ⇒ Avalon Instruments Ltd (bought by PerkinElmer September 2006),
- ⇒ Biocolor Ltd,
- ⇒ Fusion Antibodies Ltd,
- ⇒ Hughes & McLeod Ltd,
- ⇒ Kainos Software Ltd,
- ⇒ Lagan Technologies Ltd,
- ⇒ Marengo Ltd, Meridio Ltd (bought by Autonomy Corporation plc October 2007).

2. SUMMARY OF INTERVIEWS WITH PERSONS INVOLVED IN ENTREPRENEURSHIP COURSE

Definition of entrepreneurship:

People from Queen's are certain that the definition of entrepreneurship is very broad. It's not just about starting up a business. They view entrepreneurship as '**enterprise for life**' and skills which are important for everybody, not only for entrepreneurs.

David Gibson says:

"It is not necessarily about starting your own business; it is looking on innovation, coming up with new ideas."

"Everybody needs enterprise skills because now it should be an 'enterprise for life' focus. You need to be entrepreneurial to solve different problems that you will face no matter what path you will take in life," says Aisling Harkin.

Richard Millen also thinks very similar:

"It is whole thing about being creative, about being able to solve problems. If you go and don't have resources, can you find resources and make your dream true. It is all about having a vision, knowing how to get there, being creative and innovative. It's about being entrepreneurial."

Denise Collins put emphasis on skills:

"It is more about skills which you can use in your hobbies, studies, career, whatever that maybe. You must be entrepreneurial to get a better job, for example. It is all about recognizing resources that can be available for you and to take advantage of these resources."

Aim of the module:

The aim of this module is to give **awareness** to these students that **they can be entrepreneurial** – innovative, creative, etc.

"We make them aware that entrepreneurship exists. That you can be entrepreneurial, you can be creative, innovative and all the other skills that fall under entrepreneurship. To make them aware that they have these skills and that they can use these to be successful in their career. We want to show them that this option to be entrepreneurial exists" says A.Harkin.

"It is about thinking what enterprise skills are, what it means to them, then looking on developing the idea and what they would do to make this idea happen. So they are going through the entrepreneurial process but they are trying to relate it to their own area. It's important that students have a chance to focus on what they have learnt, how it relates to them, do they consider that they

can start a business, etc. But certainly it's not just about how to start up a business," says David Gibson.

Teaching methods:

⇒ **PDP** (personal development plan)

Students must reflect upon what they've learnt and how they can develop this by setting up an action plan for the future.

⇒ **Brainstorming**

⇒ **Teamwork**

For example, they look at the composition of their team, what skills are missing. They look at the strengths and weaknesses of the team and how they deal with these.

⇒ **Networking sessions**

First of all they talk about importance of networking in business, and then external business advisors, entrepreneurs and relevant people are brought in to the class so that the students can network with these people. They can talk with them and learn about things they don't know. These contacts are very good in the future as well.

⇒ **Real life projects/simulations**

For instance, there is task for students: you bought a new product and you should think about what name to use, what market you should target. Students must think about it and think about what they would suggest to a company. Students are like external consultants to the company.

⇒ **Critical incidents**

For instance, what would happen if an external investor came and wanted 50% of your business for 10 000 pounds. What would you do? It makes them think: "Oh yes, for a student 10 000 pounds is great! But 50% is actually a lot..."

⇒ **Personality tests**

Usually at the start they distribute an E factor questionnaire for students to complete. They evaluate their entrepreneurial skills – communication skills, presentation, confidence, etc. And at the end they will go back and look at how they have improved these skills.

Additionally, they look at various pictures and it provides some personality traits about that person. This is called psycho geometrics and is over 90% accurate.

⇒ **Panels-peer review**

This is a Dragons Den where they bring external people that provide feedback to the students. Students are very competitive amongst themselves. Students present their ideas and after it other

groups ask them questions and evaluate them. They are like dragons, they invest in their company and they must give the mark and say reasons why they will invest or not. Students themselves have to play the role of dragons and investors. At the end they look at all the evaluations and determine who wins. It means students are involved in the whole process which is quite good.

⇒ **Role model interviews**

They are bringing external people in who are speaking with students. Role models usually will talk briefly about what they have done, about their background, etc. Students have the opportunity to ask questions – any problems they faced, what they think success is, what was their key to success, what were the biggest problems, etc. Anything they want to ask, they are free to do so.

⇒ **Creativity exercises**

For example, they must look at a picture where maybe there are other pictures hidden and they must define things. Everyone sees things differently. One student will see one person, another – several persons.

⇒ **Workshops**

⇒ **Multimedia**

They are using, for example, *youtube* where they are watching clips from TV programmes such as the **Dragons Den or the Apprentice**. Students are analysing it - what they would do differently, what was good, bad, etc.

⇒ **Games**

For example, cash flow, business plan games, computer games, leadership games, team games, etc.

⇒ **Case studies**

Students should analyze case studies. For instance, there is a business with 2 possible strategic choices and in groups they must decide which strategy is best to follow.

⇒ **Running the business**

Students had one week in which they need to make as much money as possible.

⇒ **Business market**

Students are renting furniture from the University and they then can sell their things.

Skills:

People who are involved in entrepreneurship course were asked to choose **the five most important skills** (from the list given) which are important for entrepreneurs. The four most important are highlighted below:

1. Recognizing and seizing opportunities

2. Result orientation
3. Communication
4. Market orientation

Mostly people involved in entrepreneurship education at Queens marked the most important skills as **result orientation** and **recognizing and seizing opportunities**.

“We are asking them to think about various problems for a specific group - these can be young people, teenagers, females, etc. Then to think about products or services that can solve these problems. That’s how they try to recognize opportunities,” says A.Harkin.

D.Collins working on the extra curriculum side also thinks that students can improve these skills during curriculum and extra curriculum activities.

“Students who came to eBay seminar or we had an ideas generation workshop as well, they came with no ideas but after they have realized that there are a lot of opportunities, a lot of ideas around them. It means: to be entrepreneurial you must see opportunities. Extra curriculum just let students know that there are a lot of opportunities around them. It just opens the creative side of your brain to recognize them and know that you can do something with it.”

David Gibson during his lessons tries to improve the result orientation skill to students.

“I play a business game with them where they must make decisions; sometimes they can lose their money and sometimes students become quite upset but these are only pieces of paper but they have some kind of understanding of what they are doing. They see results and that is important because entrepreneurship is result oriented.”

Communication is also one of the most important skills which students must try to improve because it is fundamental.

“You will be communicating with your market, you will be communicating with your team, and you will be communicating with your suppliers. The persuasion aspect of communication and personal influence is very important. You must communicate with financiers to persuade them. Communications in all these aspects are very important,” says D.Gibson.

During the lessons there is a strong impact on **market orientation** as well.

“We try to look at: are there any customers? Idea competitions were very much focused on it – students should demonstrate are there any customers for their product,” explaining D.Collins.

Also, people interviewed mentioned such skills as teamwork, leadership, vision, self efficiency, self-confidence, and emotional stability. Beyond the list they mentioned more skills which are important for entrepreneurs like risk taking, financial skills, perseverance or patience and determination.

3. SUMMARY OF STUDENT QUESTIONNAIRES

...Interesting...

...Entertaining...

...Enjoyable...

...Very informative...

...Refreshing change to the normal content...

...Made me think differently...

These are the most typical phrases in which students describe the entrepreneurship module ELVIS. The module ELVIS is a compulsory module for students. D.Gibson mostly engages with 2nd, 3rd or 4th year students, but also postgraduates and PhD students. Typically he is just working with undergraduates.

My task was to get to know the students opinion about the entrepreneurship module ELVIS. To make this task more objective and interesting, I distributed questionnaires to students who came from different disciplines. For example, 3rd year *Food quality, safety and nutrition* (11 questionnaires) and 2nd year *Accounting* (30 questionnaires) students. Also I received feedback from *Innovation in Nursing* (6 questionnaires) students. It was interesting to compare their answers because nursery and food science students didn't have an economical background but accounting students had. It was interesting to see – do they find this module useful, what kinds of skills they have acquired, what they have learned during this module, etc.

Definition of entrepreneurship:

In the definition of entrepreneurship students focus on such terms as *innovation, creativity* and *new ideas* – products/services. They define entrepreneurship as:

⇒ “*the task of inventing a new product or service that can provide a good profit*”,

⇒ “*helping new ideas to grow*”,

⇒ “*the freedom of thinking and creativity which allows a person to form ideas and drive to achieve success with these ideas*”,

⇒ “*being innovative and creative and motivating to get up and do things differently*”,

⇒ “*people working in business, which can overcome the problems and analyse the situation which can lead to the success*”,

⇒ “*being innovative and starting up your own business, seeing possibilities*”, etc.

Definitions focus on such terms as “**innovative**”, “**creative**”, “**seeing possibilities**”, “**new ideas**”, “**and analyzing situation**”. It is probably because during the module there is strong focus on creative and innovative thinking and the lecturer gives students the freedom to develop their ideas.

During the lessons it is evident that the lecturer encourages them to think more creative and think about services and products which must be unique but at the same time useful. Bad ideas don’t exist; sometimes even the silliest ideas can be the best ones!

Learning activities and assessment:

During the study process students complete different activities as the length of the module is different and also assessments vary. The lecturer tries to adapt these to suit the appropriate discipline.

1. Food quality, safety and nutrition.

Assignment:

- ⇒ business plan,
- ⇒ presentation,
- ⇒ reflection on how they are working as a group.

Students in groups complete a business plan and a presentation which is based on the associated business plan..

To fulfil these tasks students had different **learning activities:**

- ⇒ constructing a business plan,
- ⇒ presentations,
- ⇒ team work,
- ⇒ Completing questionnaires,
- ⇒ Completing market research,
- ⇒ case studies,
- ⇒ brainstorming about product and idea development,
- ⇒ lectures.

During these tasks **they learnt:**

- ⇒ “*about all aspects of business – finance, sales, marketing, human resources, etc.*”,
- ⇒ “*how much work is involved in producing a business plan*”,
- ⇒ “*how firm can grow*”,

- ⇒ *“how to become an entrepreneur”*,
- ⇒ *“what is entrepreneurship”*,
- ⇒ *“how to develop ideas and how to make ideas into an actual product”*.

2. Accounting

Assignment:

- ⇒ report how to make a firm and its employees more entrepreneurial,
- ⇒ marketing plan for business (describe what kind of elements to include in the business plan).

To fulfil these tasks students had different **learning activities**:

- ⇒ 2 lectures,
- ⇒ 2 tutorials on entrepreneurship,
- ⇒ assignment,
- ⇒ marketing research,
- ⇒ team work,
- ⇒ case studies,
- ⇒ discussions (about qualities of entrepreneurship, different forms of marketing and the factors necessary for change and success).

During this course **students learnt**:

- ⇒ *“how to make business more enterprising”*,
- ⇒ *“about entrepreneurship, marketing, growth in business, setting up a business, etc.”*,
- ⇒ *“how to become entrepreneurial”*,
- ⇒ *“basically how to become an entrepreneur and what skills are required”*,
- ⇒ *“possible things I could do to improve CV and opportunities to develop”*,
- ⇒ *“we learnt about being creative”*,
- ⇒ *“we looked at entrepreneurship, what it is and what it involves, what are the characteristics of an entrepreneurial firm”*,
- ⇒ *“it gives more of an idea of the skills needed and the activities involved in entrepreneurship”*,
- ⇒ *“what entrepreneurship is and how important it is in the working world and how we can get involved in it”*.

Focus on entrepreneurship:

Mostly students found out that **there is clear focus on entrepreneurship** because in each lesson they talk about entrepreneurship – what is necessary for starting up a business, etc. Students developed their ideas, made a business plan and had understood that entrepreneurship can be very worthwhile and make money. Also there was answer that *“he teaches entrepreneurship at a practical level”*, *“lectures refer to life experience”*, *“our lecturer is an entrepreneur so he knows the topic very well”*.

According to these students viewpoint the course prepares them **quite well** because they were developing ideas which helped them to think about funding, finance, etc. Also some of the answers include *“becoming more aware of areas to focus on”*, *“lecturer was thorough, enthusiastic and gave real business examples”*, *“gives further insight into what would need to be done if deciding to follow that sort of path”*.

Most of the students mentioned that the course prepared them **very well** because lecturers and tutorials explained what entrepreneurship is and how it operates. *“It clearly showed how accountants could act entrepreneurial”*, *“David’s personal experience gives a real insight to entrepreneurship and it is well tailored to accountants”*, *“it was very explanatory in the topic and gave me a good knowledge of the topic”*, *“I knew nothing about entrepreneurship before. I found it very interesting as the lecturer covered the topic well. It has made me consider that I might like to become an entrepreneur”*.

Just some students from both groups mentioned that this course prepared them **reasonable** or **neutral** because *“business plan was imaginary. I am still unsure of what it would be like to realistically create a successful product”* and *“there have been aspects that I knew before starting the course however some information has been new”*.

Skills/competences:

According to the questionnaires students have mentioned that during the entrepreneurship module they have acquired good **teamwork, planning and organizing, leadership, and market orientation and communication skills**. These 5 skills are mentioned as most important.

I found that the difference between *Accounting* and *Food quality, safety and nutritious* students was that such a skill like **recognizing and seizing opportunities** was strongly improved for accounting students. But *Food quality, safety and nutritious* students mentioned that they feel more **self confident** thanks to this module. It is probably because before they didn’t think about entrepreneurship but during this module they found out that it is impossible to start up their business

and they don't need to be afraid of it. Also, this difference can be explained because of different tasks and assignments.

Students add other skills which they have acquired during the module and which they find important for entrepreneur - creativity, innovation, self disciplined and determination.

General feedback:

In general students are more than satisfied with this module. They are saying that *“nurses can have good ideas that will improve quality of care”, “any idea is a good idea”, “this course was enjoyable and good opportunity to work as a team”, “good opportunity of brainstorming”, “everyone can come up with a useful idea and that most good ideas come from everyday experiences”, etc.*

All this prove that students after this module feel **more confident** about their ideas and at least have thought about **starting up a business**. And it is common for both – students with and without business background. A lot of students after this course assume that in the future they can set up their own business.

Also a common thing was that students have become more entrepreneurial and enjoyed the module very much.

Also the fact that students are more than pleased with this module is represented in an email from one Mum below:

23st March, 2007

“My daughter attended a lecture you gave to Environment Planning students yesterday and she was very impressed with your input. She feels you have a lot to offer in terms of planning in secondary education and if you think you could help us in developing entrepreneurship in our curriculum in St Mary’s I would be most grateful.

I hope this is not too much trouble.

Thank you,

Marie Lindsay”

4. OBSERVATIONS

4.1. OBSERVATION IN THE CLASSES

I took a part in several classes including Accounting, Environment and Planning, Food Science, Psychology undergraduate students. I observed lessons with postgraduate students who are studying Film studies and also I took a part in a mixed PhD students group.

First of all I was surprised about the technical support. In all rooms are internet, plugs and students can freely use their laptops. Also, almost all rooms had a blackboard. It allows the teacher to use different teaching methods – power point, posters, etc.

Secondly, it was my pleasure to participate in David's lessons because this course is similar for all students but he is working with them in a completely different style customised to their discipline. Because students are coming from different backgrounds and David tries to tailor this course for each group, so that they can find the link between entrepreneurship and their subjects. So it was really interesting for me to participate because it was interactive, exciting teaching and I didn't become bored!

Thirdly, David tries to engage all students in the learning process – he is asking a lot of questions, holding discussions, inviting them to think about different problems (case studies) and find solutions, working in groups, etc. He is asking students to think and analyze. Students can't sleep during the lectures because it's too interesting and they must think all the time. It is not one way communication. I could see the feedback.

Fourthly, I saw that it doesn't matter how big the class is (5 or 300 students) because it is possible to make it interactive as well. David could engage all students, he had good persuasion skills and he is very enthusiastic.

4.2. OBSERVATION IN THE COMPETITIONS

I took a part not only in the lessons but also in the competitions. During my visit there was a competition “**What's the big idea?**”. This competition was open to all undergraduate and postgraduate students studying at Queen's who had an exciting and novel business idea. There were 12 prize categories and a total prize fund of £ 2000. This was very attractive for students to participate and get involved in this competition.

Students were assessed in 12 categories:

⇒ best Overall Business idea (£ 500)

- ⇒ most Creative Business idea (£ 500)
- ⇒ Most technologically innovative Business idea (£ 100)
- ⇒ best business idea for a Global Market (£ 100)
- ⇒ Best product – based Business idea (£ 100)
- ⇒ Best Service – based Business idea (£ 100)
- ⇒ Greenest Business idea (£ 100)
- ⇒ best Business idea for the Students Marketplace (£ 100)
- ⇒ best 'Not for Profit' Business idea (£ 100)
- ⇒ best Business idea from Faculty of Arts, Humanities and Social Sciences (£ 100)
- ⇒ best Business idea from Faculty of Engineering and Physical Sciences (£ 100)
- ⇒ best Business idea from Faculty of Medicine, Health and Life Sciences (£ 100)

I participated in assessing the process and I saw a lot of interesting ideas like the creation of a software programme for new parents, a student housing website for Belfast, online learning for English, safe and environmental friendly plug, etc. I was really surprised that not typically economic students were the best idea generators but students from other disciplines – especially engineers.

Also during my visit time in Queens was the **business plan competition** which I took a part in. It was made like Dragons Den. Students presented their idea, their plan and judges were like dragons who assessed them and asked questions. Such activities helped students to considerably improve their presentation skills.

5. STRONG AND WEAK POINTS OF ENTREPRENEURSHIP EDUCATION IN QUEEN'S

The strengths and weaknesses about entrepreneurship education in Queens are made based on interviews with the people who are involved in the entrepreneurship field in Queen's as well as the feedback from students.

STRENGTHS

⇒ **Pedagogy style.** The pedagogy is mostly **innovative, interactive.** It make sense for students that entrepreneurship is an option for everyone.

⇒ The entrepreneurship module ELVIS is **stimulating.** At the beginning students don't believe they can be creative or innovative but David shows them it is more then possible.

⇒ **Permanent work.** When Queens decided to do this entrepreneurship module ELVIS they decided it would be permanent. One of the mistakes other universities made was - they found people like David Gibson and then gave them short term contracts, with no security. If they found somewhere good, they left. When David came, he got a 3 year contract and soon it was extended.

⇒ **Management in responsive way.** The other strength is the way in which they have managed the project ELVIS. It has not been managed in a directive way; it has been managed in a responsive way. Queens just said that they want to embed it and mentioned some learning outcomes of this but didn't give direction on how to do this.

⇒ **Queens Certificate in entrepreneurship studies.** One of the key things is that students who do the enterprise and entrepreneurship, when they graduate, they graduate with their degree but also with a Queens Certificate in entrepreneurship studies.

⇒ Queens are **creating an entrepreneurial work force.** Students who go into the companies are providing new ideas, giving their employers new ways of doing things; some sort of stimulation to do much more because this is what they have learned during the module ELVIS.

⇒ A lot of **competitions** (the best business idea, the best business plan, etc.) for students outside the curriculum. It encourages students to think about entrepreneurship also outside the curriculum.

⇒ **Academic business planning exercises and idea generation courses.** It means they are creating a culture where people can think freely. They try to make academics more 'free thinking'.

⇒ In Queens they have established some kind of **innovative culture.**

⇒ **Common entrepreneurship strategy.** All of the people making a contribution in entrepreneurship education see themselves as working with one aim. Involvement of the Career

Service, involvement of Science Shop, involvement of NICENT, involvement of Regional Office, involvement of Employability Centre, etc. All these are integrated together.

⇒ They are moving to an environment where the emphasis is very much on not how they transfer the knowledge but **how they make money from knowledge**.

⇒ Recently the established **enterprise employability centre** in Student Union which is used for sessions bringing in various speakers. It is also like evidence that university has made further investment in employability skills.

⇒ They have **QUBIS** office which their aim is: creating spin out companies from Queens. They are number one in the UK and Ireland in the revenues of spinout companies. They have created more than 50 companies. They have a long history and because of that they can use a network and relationships to bring different people together and help them with the creation of their business.

⇒ **Research and Regional Service** look at **how every research is transferred into the economy**.

⇒ **Science Shop**. It gives people project work as part of the curriculum.

WEAK POINTS

⇒ The entrepreneurship module ELVIS is **difficult to embed in the curriculum**.

⇒ **Hard to engage students in extra curriculum activities**. Students have a lot of work, studies, etc

⇒ They should **link even more curriculum and extra curriculum activities**.

⇒ In Queen's they have good extra curriculum things but it's not enough. It should be improved but the problem is **lack of human resources**.

⇒ **Lack of innovative people**. They don't have academic staff in the schools who could deliver the sorts of learning outcomes that David delivers.

⇒ **Customization of programme**. They must tailor ELVIS to many different groups of students across the university. It's very difficult to always customize that to specific subject.

6. AUTHORS VIEWPOINT ON QUEEN'S UNIVERSITY BELFAST

First of I would like to say that David Gibson completely turned my head in the entrepreneurship field. When I went to Belfast I had the classic and traditional understanding of what entrepreneurship was. From my point of view it was starting up a business. I had a belief that: Entrepreneurs are born not made. You are born creative and you can't teach that skill during the course in university. Also it's not possible to teach self confidence, But now I know – its rubbish. Imagine: in our childhood we were all creative, we all could easily imagine that when we were “playing home”, almost all of us have sang some song, danced, played theatre, etc. it all proves that people are creative, we just must open out minds and look around us.

And in Queens, the entrepreneurship module ELVIS, focuses not on the traditional understanding of entrepreneurship (as starting up a business) but making students more entrepreneurial. And during these two and half weeks I changed my mind as well and believe that even I could be successful entrepreneur.

From my point of view the things they are doing in Queens are really brilliant because they attempting to open students' minds, trying to show them that you can learn in a very creative way. You don't need to give exams where students just rewrite definitions, etc. No! They are teaching students to think, analyze and look on real life examples. I saw it during my observations. I took a part in several lessons and it was really interesting. I think that observations actually were the most important part of my research because I could see how it works in reality.

Also, it is good that they were organizing different competitions because it stimulates students to think about entrepreneurship outside the curriculum as well. I guess in the future the enterprise centre will be even more significant and more attended.

I think the biggest strength of why Queens are successful in the entrepreneurship area is that inside the university they try to collaborate. Of course this collaboration could be improved but they make a conscious effort to achieve similar goals and try to develop common policies, strategies on how to achieve these.

But the main factor that makes entrepreneurship successful are the people. Enthusiasm is the basis of everything – base for good teaching and Aisling Harkin and David Gibson are the best examples!

APPENDIX

“ENTREPRENEURSHIP IS OPTION FOR EVERYONE”

(D.Gibson.)

Name of the person being interviewed: *DAVID A. GIBSON*

About person: He is entrepreneur and Senior teaching Fellow in Entrepreneurship at Queens University, Belfast. David was recently awarded a National Teaching Fellowship by the Higher Education Authority, the first awarded for Entrepreneurship Education in the UK.

David is the author of books “The E factor”, “Guide to Starting Your Own Business”.

He has owned and led several business enterprises. He is passionate about developing an enterprise culture and provides advices and support for start up businesses. He also works as a Financial Consultant, developing exit strategies for Family Owned Enterprises.

Date: April, 2008

Educational institute: Queen’s University Belfast

Involved in entrepreneurship course: Entrepreneurship module ELVIS



How can you define entrepreneurship?

Being entrepreneurial and being enterprising is not necessarily about starting your own business, it is looking on innovation, coming up with new ideas. The idea might be for social enterprise, the idea might be to develop the project in your company or your organization. It is also about life long learning that you need skills how to dress, etc. I have a module in which I come up with these ideas but before I did a lot of work to see what entrepreneurship literature says about entrepreneurship.

I negotiate, try to **persuade academics** that **students should do entrepreneurship module**, and they must put it into curriculum. I try to explain why they must include this module. For example, if you want to be a teacher in the school, you don’t want to be an entrepreneur. But... to be entrepreneurial, to be innovative, to be creative, to make things happen, it’s should not be just for business staff.

I would look for a module ... maybe third part of this module... let’s give me example in nursing. They have a module in professional practise in third year, so maybe I could do a third of this module where I would do enterprise in nursing: how they can develop their career as nurses, how to develop ideas and solutions to solve problems in health sector, etc. **It is working very much in an experiential way.** It’s about doing things, discussing and making things happen. Academics, some of them, are very tough, they really don’t want this but we manage to get an opportunity and it works with students. **And it tends to stay in the curriculum and be sustainable.** So far it has been very successful.

What do you think - person is born to be an entrepreneur or you can teach him this?

First it depends on your definition of the entrepreneur. Some people think that you must be worth at least 1 million sterling. But there are also social enterprises. In my view **you can learn to be more entrepreneurial.** You have to know what you want, you have to be prepared to learn and so on and

so on. That would be the module. If you look on different modules, some of those are knowledge of entrepreneurship. Our module is more about being entrepreneurial, I suppose. It's not easy that you don't have money, no contacts; you are very shy. That makes it difficult. The challenge is if you really want to make it happen you probably need some mentoring or someone to be there. When I am crying you are my mentor. If you don't have money, how can you get it? It's difficult. But I do believe it's possible for anyone.

Are you entrepreneur as well?

Not really. Originally I am entrepreneur; I still run one of my businesses. I am not involved; I am just a shareholder because it is more teaching and learning. It is the time. I don't like writing research and I am not a researcher but I feel I need to get research journals published, to show my module of entrepreneurship education ELVIS. I know it sounds very strange! (*laughing*)

Yes! What does it mean?

It is not because I like songs of Elvis Presley. It is about how entrepreneurship education system works here.

E - is for **embedding**, that we insist enterprise and entrepreneurship inside and outside curriculum. First of all it is embedded in curriculum for all students that they can decide where they fit in, whether entrepreneurship fits with them, their career aspirations, where they want to go. After that student starting their own businesses, students have been successful in their careers, academic spinouts, researches. The embedding has been the core item.

L – it's for **linking** the system - linking all different parts of enterprise education inside and outside the curriculum, businesses, researches, etc. It's all linked together.

V – it's for **valuing** all resources, all the stakeholders in the process.

I – is for **innovative** teaching and pedagogy and also institutional support. Without institutional support it will not happen.

S – for **student centre**. It must be what the students want. They must drive it; it must give them what they want in terms in their career, business or life inspiration. Development and innovation should be based on feedback from them. There also should be strong alumni system, linking them with existing students and also involvement, linkage with business community.

You want to embed ELVIS in all disciplines. How did you do it till now? How did you find a place in curriculum?

We found the module where students are doing something about business, maybe something about research but there is big gap and it became a part of this module. So actually it is not something new. We linked and customized it for people in this school.

It was difficult, I guess.

Yes, we were looking which modules most fit in and where we can really get in. And then we should negotiate with academics which were the top part.

In how many disciplines you already have embedded ELVIS?

We have **embedded ELVIS so far in 53 disciplines**. University has 21 schools. We are already in Science and Engineering areas curriculum for couple of years. **In putting entrepreneurship in the curriculum we are the only University in UK**, I am not sure about Europe or USA, where it is so widely. In this year I am putting it in film studies, we will embed in curriculum. We have embedded this year in music, teaching education.

I have been working to get them from September for English, Sociology, Politics. So we almost put these in the curriculum.

So at the end there will be only 2 people who will really understand it – it will be you and me (*laughing*). It is very different module and it is quite unusual because Queens are a Russell Group University, it means **we are in the top 20 research universities in the UK**, between Cambridge, Newcastle, etc. Normally they are not in this innovative learning, teaching. Research universities want students to get research and academics are very against this idea. It's being like teaching, learning.

It's having been very successful but very, very challenging, it is almost like running a business. At the moment I'm having one school that are being very difficult. Their attitude would be that we are studying a certain area, why should our students do that? It's for management, business students! But the view is that **enterprise and entrepreneurship is for all students, they must be aware of it, there should be an option.**

How long time you are in Queens?

I have been five years in Queens, before I was in University in Ulster, in the Business school where I run women entrepreneurship programme.

What are the difficulties with students who are studying this entrepreneurship module but who aren't business students?

Our module is different. You can't get in the class and have 100 business students who are doing entrepreneurship studies. We can't do standard phrase, how to do things. We must act differently. Students can think: "What I am doing here? Why should I study this?" In an hour I must try to persuade them to come back next week as well to my lesson.

Being innovative is a big risk.

So sometimes students don't understand why they must study entrepreneurship if they want to be a teacher, nurse, etc. Isn't it difficult to persuade them?

Yes that's a challenge. I have to be very flexible. Colleagues who are teaching just one module, their life is easier than I have. I have a lot and a lot because I started the project and I care passionately about it happening and going through. I wouldn't leave at least another year, 2 years.

I believe every student needs to learn to be enterprising, to be entrepreneurial and making things happen.

Do you teach for all these students the same?

No, we try very hard; you will probably come to a conclusion by yourself. I believe that there is a big attempt to try customizing, to maybe change other materials to show and understand their perspective. The **idea is to customize**. For example, film studies want something very specific, maybe business plan production. I've got to probably change that.

But certainly each case is quite different, each student. Some of them will grasp social enterprise, some will need skills to develop their career, some would like to start their own business. Trying to do this is very difficult, you will never be sure.

Is this module optional or obligatory?

The aim is to make it compulsory, its part of module, and you must do it. In most cases we do. In St. Mary's university college they have kind of push for their students to do this. But they haven't pushed them until they haven't seen it because this is the first year running. If the students will like it, then it will become compulsory. So it's a kind of pressure to please everyone to do it.

At the beginning I noticed that these students were scared, they didn't know. Say: "You must all be Richard Branson. English is rubbish." It's not what I think. If you are doing English, you should

be looking at: Are you creative or you can come up with ideas, how can you publish it, how can you make it happen, how can you move from that place to where you want, etc.

It's should be compulsory because these are the most unlikely students. These are students who are doing let's say anthropology and don't have any idea about entrepreneurship but maybe they will find a link: use anthropology to set up a project, etc. You can make an impact. It should be in the curriculum.

Which course/year students are you teaching?

We are working mainly with 2nd and 3rd year students. I do a little bit with 1st year and Aisling is doing a little bit with 4th year as well.

PhD mainly is not our responsibility. I wanted to take over everything. (*laughing*) But PhD students don't want to do this skill module. They think it is waste of their time, they want just to make research, and they don't want to do the skills. But I believe they have to know it.

The problem with masters is that in group maybe are 4 or 5 students, but I am used to work with bigger numbers. **Our responsibility basically is undergraduate students.** Everybody has their own area.

In this entrepreneurship module ELVIS you focus more on practical tasks?

We have limited time. You would need a lot of time to teach just entrepreneurship but our module is about 8 - 10 hours. **It is about thinking what enterprise skills are,** what it means to them, then looking at developing an idea and what they would do to make this idea happen. So they are going through the entrepreneurial process but they are trying to relate it to their own area. It's important that students have a chance to focus on what they have learnt, how it relates to them, do they consider they can start a business, etc. But certainly it's not just about how to start up a business.

We are not doing theory so much because our module is not about getting theoretical outcomes but becoming entrepreneurial, entrepreneurial mindset.

What kind of assessments do you use? And what kind of teaching methods do you use?

They can do practical tasks, so they must **reflect on what they have learnt.** Also they can be assessed by other people in their group – did they play a part or not in developing idea and making it happen.

We have customized many **case studies.** Not like Harvard case studies which are like 40 pages, very technical ... We look for case studies where they can reflect on their area – it could be nursing,

engineering, education, etc. So they would have done some practical things and submit that for assessment. If we can we try to go for very innovative ideas.

We create **networking situations**. Students were assessed in the curriculum on how they performed other networking events with entrepreneurs, with potential investors, with local, regional funding agencies – did they ask the right questions, how they came across. We received feedback from entrepreneurs - did they follow up. They were assessed on writing the theory on networking, how did they perform. We always ask them to reflect on their performance.

Last week we had a **business game** built in course for 62 humanity students. For 3, 4 days they were looking over the problem, developed the answer, solution for potential product. Then they had to use materials to create a paper prototype and then to put an **exhibition** of 3 days where some business people, people from university came and assessed how they did.

What's the advantage of your course comparing with other entrepreneurship courses?

Pedagogy style. The pedagogy is mostly **innovative, interactive teaching methods**. I think we are the only University who is doing entrepreneurship in so many disciplines. I am an entrepreneur myself so it comes from real knowledge and wisdom. **We make sense for students that entrepreneurship is for everyone, its an option for everyone.**

One of the key things is that students who do the enterprise and entrepreneurship, if they will pass the module, when they graduate, they graduate with their degree but also with **Queens Certificate in entrepreneurship studies**. So this year we will have probably 2000 - 3000 students who will graduate with it. Each year this amount becomes bigger and bigger. If they want to start their own business it can help them. We are continually introducing new things.

What are the strong and weak points of entrepreneurship education in Queens?

We should **link more curriculum and extra curriculum**. We already are working together; we are very strongly linked with working together. For example, in **Big idea competition** – it's about coming up with idea, writing small summary about it. I think **we are the first university in UK to have an extra curriculum enterprise run through the Students Union**. I have encouraged my students in the curriculum to enter these competitions which will be judged next week.

Queens is also **1st in UK for academic spinouts**. Sometimes there is not a lot of emphasis in someone who wants to run a small business but that person needs to do it in a couple of years.

We have a **School of management** but it's quite traditional. There are some good teachers. For students who spent maybe one or 2 years doing very theoretical, deep knowledge, ELVIS module should be really different

In our module we put emphasis on skills. Also we are doing very well in extra curriculum We are **probably the number one in Northern Ireland student business plan competition.**

Can you select from this list 5 skills that you find most important for an entrepreneur? And can you explain why these skills are important? Can students improve these skills during ELVIS module?

1. Result orientation
2. Recognizing and seizing opportunities
3. Negotiation
4. Communication
5. Reflection

At the beginning we would ask students to write what skills they have. And at the end of the module we give them to assess their selves again. They can compare their skills at the beginning and at the end. We ask to reflect: what did they get out of this module, do they feel that they can be entrepreneurs, etc.

It is some kind of measure, what results they have - practise skills, negotiating skills, etc. I play with them business game where they must make decisions; sometimes they can loose their money and sometimes students become quite upset of that but these are only pieces of paper but they have some kind of understanding what they are doing. They can have a result because entrepreneurship is **result oriented**. There is some kind of score, where you are.

Number two is **recognizing and seizing opportunities**. Obviously at the beginning we have some kind of idea. As it is developed, then you must think: What are opportunities for you to get funding? What are opportunities for you to get market?

We try to get people to think creatively, looking for problem which becomes an opportunity. And the rest of course is based on you to make it happen.

Communication. You will be communicating with your market, you will be communicating with your team, and you will be communicating with your suppliers. Persuasion aspect of communication and personal influence is very important. You must communicate with financiers to persuade them. Communications in all these aspects are very important.

Negotiation is number four. I always come to this course that you need to have an idea but you must turn idea into reality. I always teach that skill. For instance, in the panel they are negotiating.

Reflection. Students have to reflect what they have learnt from lectures, what they have learnt from business games, etc. The way we are doing with Food Science students is that when they do their presentation for business plan, outside panel, the panel will provide them with written feedback sheet and 10% of total mark of module will be how they reflected on a feedback from panel and what they would change in their business plans on basis what panel said. They are assessing themselves and learning from feedback. Students very often are interested just in the mark not in the feedback: It's a very good mark, it's bad, that's fine. So its good way how to let them look on feedback and make them think about it.

Are there some skills missing?

Determination, financial skills and market research.

What's the situation in Northern Ireland – are there too much entrepreneurs or too less?

We desperately need a lot more people running their own businesses. But it is also about creating a business which will go outside Northern Ireland. We need people with entrepreneurial skills to innovate Northern Ireland situation.

We used to have very strong economy 30 - 40 years ago, and then we had some problems. Most people were working in public sector. So we had very strong industrial base 40 years ago.

We also need people who even know that they won't start their own business but will be innovative and able to make things happen. There is need for that. There is need as well for students to have skills. There is confusion where the enterprises are and where employability is. In my view enterprise makes you employable but it's more flexibility, skills of surviving. It is that but it is also developing initiatives. Also it is very important to learn how to sell what you've got, what you produce.

Our **focus** always has been on our method: **to get the best education of practice in higher education.** That is why I won the national teaching fellow prize in entrepreneurship education, partly because of fact of university but also because method is very innovative.

Do your find your job difficult?

Education is easy for me because I believe in education and teaching!

“IT IS ‘ENTERPRISE FOR LIFE’!”
(A.Harkin.)

Name of the person being interviewed: *AISLING HARKIN*

About person: Entrepreneurship teaching fellow

Date: 16.04.2008.

Educational institute: Queen's University Belfast

Involved in entrepreneurship course: Entrepreneurship module ELVIS



How can you define entrepreneurship?

I think entrepreneurship is something very, very broad with no one universal or agreed upon definition. I don't feel that it is merely about setting up your own business. In my own research entrepreneurship is... new venture creation and its subsequent growth; yes it is most definitely part of it but does not complete the picture. I think it is so much broader than this and one cannot simply just focus on this part alone. That would be a very narrow perspective of entrepreneurship. In my own research entrepreneurship is associated with growth firms as well, how they spot opportunities and then assemble resources to facilitate the exploitation of those identified opportunities. I think the entrepreneurial **mindset is hugely important** for education as well. We are working under an 'enterprise for life' initiative; I think we can transfer entrepreneurial skills to students that they then can take with them into future projects and the workplace as well. **We want to prepare students for a very successful career where they can bring and develop their entrepreneurial skills and use very effectively.** Entrepreneurship is not just about starting up a business; **everybody needs enterprise skills because now it should be an 'enterprise for life' focus.** You need to be entrepreneurial to solve different problems that you will face no matter what path you will take in life.

You are teaching fellow in entrepreneurship module ELVIS. It means you must teach entrepreneurship to very different students – Food Science, Accounting, Nursery, etc. How do you tailor this programme for all of them?

We try to relate this entrepreneurship course to what students are studying, to their course subject. We try to develop it jointly and to collaborate with the relevant schools to insure that it meets their needs as well as those of their students. It has to be relevant otherwise it will simply not work. It must be closely linked with the module that it is embedded in also to ensure that it fits in with students are doing. We try to measure the associated outcomes and give them some feedback. We

ask them to write **PDP** (personal development plan) to reflect upon what they've learnt and how they can develop this by setting up an action plan for the future.

What's the context of this module? What's included in this module?

Entrepreneurial skills such as creativity, innovation, networking, teamwork, leadership, personal effectiveness and negotiation, communication are some of the skills that are embedded in the module. There is a team created and then they find idea and then they must think how to make this idea happen, what are the next steps they need – finance, marketing, strategy. All these sort of things must come together. It's very much business planning, organization. They have to think about customers, target market, resources, and things like this.

What's the aim of this course? What's the message you want to deliver to those students?

It depends on the time you have with students. It's about awareness. We **make them aware that entrepreneurship exists**. That you can be entrepreneurial, you can be creative, innovative and all the other skills that fall under entrepreneurship. To make them aware that they have these skills and that they can use these to be successful in their career. Get them to think about ideas. We want to show them this option to be entrepreneurial.

What kind activities you use in the sessions?

It really depends on the time we have with them. In the **first session** we pay attention to innovation; we introduce with whole entrepreneurship area. In first session we are usually asking them: are you creative? And a lot of students would say "no", they don't think they are. Then we ask them to stand up and then sit down if they have never done this: Have you ever drawn the picture? Have you ever sung the song? Things like this. So everybody has and all students are standing. It demonstrates that at some point you were creative and you still are. You just need to find that creativity again.

In the **second session** we ask them to generate ideas, to work in groups, to brainstorm. to come up with ideas and usually present it to the class.

The **third session** is entrepreneurial team building. They look at the composition of their team, what skills are missing. They look at the strengths and weaknesses of team and how they deal with these.

Can you tell more about teaching methods you use?

We do a **networking session** with them. First of all we talk about network importance in business, then we bring in external business advisors, entrepreneurs and relevant people in class and then they network with these people. They can talk with them about things they don't know. These contacts are very good in the future as well.

Also we use **real life projects/simulations**. For instance, you bought a new product - what name should be put on it, what market you should target. It's about development process. Students must think about it and think about what they would suggest to company.

Or for instance, what sort of product extension could we go on to, what they can suggest what methods they will use to show the knowledge of market, opportunities, etc. It put students in the position to think about how to grow the company. Students are like external consultants to the company.

Critical incidents – for instance, what would happen if an external investor came and wanted 50% of your business for giving you 10 000 pounds. What would you do? It makes them think: “Oh yes, for student 10 000 pounds is great! But 50% is actually a lot...” So things like that. Or a competitor has come in to the market with very similar product to you. What would you do? What is your strategy, your plan? Look at your weaknesses on your team and think how you will overcome those. These are always critical things which students must solve.

Personality tests. Usually at the start we give an E factor questionnaire and they go through it. They evaluate their entrepreneurial skills – communication skills, presentation, confidence, etc. And at the end they will go back and look at how they have improved these skills . Additionally, they look at various pictures and it provides some personality traits about you. This is called psycho geometrics and is over 90% accurate.

Panels-peer review. This is a Dragons Den where we bring external people that provide feedback to the students . Students are very competitive amongst themselves. Students present their ideas and after it other groups, not only me, ask them questions. Sometimes the groups come up with very interesting questions. Then they evaluate them. They have a sheet like dragons den thing. They are like dragons, they invest in their company and they must give the mark and say reasons why they invest there or don't. Students themselves have to play the role of dragons and investors. At the end we look at all the evaluations and determine who wins. It means students are involved in whole process which is quite good.

Role model interviews. We are bringing external people in who are speaking with students. They try to be as relevant as possible to what students are doing. Role models usually will talk

briefly about what they have done, about their background, etc. Students have the opportunity to ask questions – any problems they faced, what they think success is, what was their key success factors, what was the biggest problems, etc. Anything they want to ask, they are free to do so .

Also I have **creativity exercises**. For example, they must look at a picture where maybe there are other pictures hidden and they must define things. Everyone see differently. One student will see one person, another – several persons.

I also try to use a lot of **workshops, multimedia** in my classes. For example, I use **Dragons Den** - TV programme – in *youtube*. I demonstrate some clips and stop it and then I ask them to evaluate, what they think about it. I ask them to analyse it – what they would do differently, what was good, bad, etc.

Another thing is the **Apprentice**. Young business people are coming with the aim that they want to work for Alan Sugar . It is a competition between these people. Each week they must do different tasks and there is one winning team or losing team. Losing team goes to board room and Alan Sugar will fire one of them. We can watch with students and analyze it – why this team was successful, why this person was fired and not other one, what went wrong, etc. They try to think.

Also we try to involve them in **games**.

What kind of games do you use during the teaching process?

For example, here you can see one of the games (*showing me*) - there are different cards with different problems and students must find solutions for these problems – how will they deal with certain scenarios? What is marketing? Etc. This game is specifically based for restaurants but still it is very useful.

Also we use game - **Cash flow** – it is more about finance. This we don't use so often, maybe if we have entire module.

Another game is **business plan game**. Students have an idea and then they have a goal and they put idea here and goal here (*showing different places*). And then as a team they look on different cards and options. There is different stages, money, critical incidents, etc. They must plan forward. They must think about steps what they must to do – they must build their plan and follow to it.

Also we use **computer games, leadership games, team games**, etc. For example, one of team games which we are playing is: Each group have to shuffle the newspapers as much as possible and then they must pass newspaper to another team. Then they must put in right order. And then we analyze: why it took a longer time for one team compared to another team to do this task, etc.

Another thing which I found was very good was to **put a sheet on your back**. Each team member (he doesn't know which) are writing something about the person – you are good in this and this or you are too shy, you are not a good communicator, etc. It is good for the person because the person can read all these things later.

How often you organize competitions for students?

Usually there are couple running each year. Before Christmas we had a **Dragons Den** - in each class we had all pitches and then all winners came to a larger Dragons Den. It was cross disciplinary. Before there was one Musician Dragons Den, one Educational Dragons Den, one Engineer Dragons Den and then winners came together. There was a prize – money. It is because we have to put a competitive element as well.

I see you use a lot of interesting teaching methods.

We do all this stuff because these aren't typical business or management students. They **aren't interested in theory**. They didn't go to study business or entrepreneurship, that's why they are thinking: “Why must I do this? I feel bored. I don't want to know or do this theory about entrepreneurship, etc.” They are not interested in theory, that's not the way to get them engaged in this. We show practical things.

We also use bebo – it is like a network where students can log in and their profile picture comes up and they can speak with each other, write comments. We use it to **keep in touch with students after lessons**, to inform about extra curriculum activities, what is going on here in university.

It is good way of communicating with students – you can add them as friends or you can block somebody, you can see profiles of them, etc. For example, it is good way to let them know about things what is going on and good way to link curriculum staff with what we are doing. Also in this way we can get e-mail addresses for extra curriculum. This is what Denise is doing. The bebo service is very popular especially in UK and Irelands. It is something very similar to facebook and myspace.

What assessments do you use?

It really depends on the time we have with this student group. So it depends how long we have to work with them. Sometimes we have got an entire module, then we use exam questions or possibly students will be required to submit a business plan but generally more often we don't. They have to

just submit to start their plan, their idea. So... it really depends on the time we have with students. With a lot we have just 6 hours in the class.

How long is this module normally?

In general the module is 12 weeks; there is 2 hours of lectures and tutorials. **We maybe spend quarter of this module or a third of this module.** It really depends how much time we have with students. Sometimes these are just 2 – 4 days. We must be very flexible. Sometimes you have done an entire module but usually, more often not.

How many people are involved in this ELVIS module?

David, me and Jonathan. We 3. Other lecturers are very focused on module.

What's the feedback from students?

It was really enjoyable, it was unusual, it gave me something to think about (and this is what we want!), interaction with other students from class member, presentation skills was great, etc. These are things which we typically get back.

Can you select from this list 5 skills that you find most important for an entrepreneur? And can you explain why these skills are important? Can students improve these skills during ELVIS module?

1. Recognizing and seizing opportunities
2. Self efficacy
3. Vision
4. Teamwork
5. Leadership

Recognizing and seizing opportunities - we get them to think of social trends, highlight realistic problems what they see. We are asking them to think about various problems for a specific group - these can be young people, teenagers, females, etc. Then to think about products or services that can solve these problems. That's how they try to recognize opportunities.

The next is *self efficacy*. There are a lot of small role models. Also I use multimedia to show young entrepreneur role models and they must analyze what skills they have, can I do it as well. They just must learn to believe to themselves.

Vision. It's about strategy - your goals and objectives, where you want to take this to in the next 5 years, what steps to take, etc.

Teamwork. It is very important. That's what we are doing in sessions – looking at the composition of your team (strengths, weaknesses), how you can develop trends and cover your weaknesses, what are the skills you need to bring in, etc.

Leadership is that you can inspire and lead the team, we ask them to reflect on their team performance: do they believe the team has one or more leaders and why is that, what type of leader they have, etc.

What are the strong and weak points of this entrepreneurship module ELVIS?

I think the strong point is that students are really **interested** in it; they are really involved in it. For examples, engineers and humanities have never thought about being entrepreneurial, about business. But we introduced them to this area. Maybe it is not something that they will do immediately after graduation but the skills they acquire are transferable into their future career path and possibly they will start up a business at some point also once they have the experience and the networks They will be more alert to **different opportunities** around them.

The difficulty that we have is that we must work with so many different groups across the university. It's very **difficult to always customize** that to specific subject as much as we would like in addition to finding a relevant role module which the students can relate to.

“YOU CAN’T TEACH PEOPLE HOW TO BE SELF CONFIDENT BUT THEY CAN BECOME MORE CONFIDENT.”

(J.Scott.)

Name of the person being interviewed: *JONATHAN SCOTT*

About person: Entrepreneurship teaching fellow

Date: 15.04.2008.

Educational institute: Queen’s University Belfast

Involved in entrepreneurship course: Entrepreneurship module ELVIS

How can you define entrepreneurship?

I do distinction between entrepreneurship and running a small business management. If you look on some literature (Carland et al, 1984, 1988), for example, there you can see a difference between small business management and entrepreneurship.

You had worked before in Aston University, Birmingham in entrepreneurship field.

I have been teaching entrepreneurship - basically from introduction, starting from what is entrepreneurship, entrepreneurial personality, why people start their business, how do you identify opportunities, different sources of opportunities, where to exploit these opportunities, and then how to develop strategy, vision, mission, writing a business plan, making a market research, financials. And then we would focus on growing the existing businesses. There was a lot of theory of entrepreneurship and we used also case studies because it should be practical, relevant to students. We tried to find a balance.

How did you find this balance between theory and practise?

We had only 10 weeks of 2 or 3 sessions, we needed to find couple of assignments. The first normally would be to go and identify a small business, to go in and find out a market position, competitor strengths of business, to do **evaluation of business**. They must find out: What’s the market? Who are the competitors? Who are the customers? They must analyze the company and do evaluation of it about its market position, competitors and strengths.

Then we had...They come up with idea and then they should write a **business plan**. These are practical tasks but based on theory.

And then every week **case studies** which are practical and done in groups. They should analyze these case studies. For instance, there is business with 2 possible strategic choices and in groups they should work out which strategy they should follow.

The same you are doing here, in Queens?

We have small number of sessions where we cover different opportunities - something from marketing, finance. I have been involved in one teaching session and in business game. And I am just starting to understand the way they are actually doing things here. I just started at the beginning of March and I still have time to understand things here.

The **business game** was extra curriculum; students from any discipline could take a part of this business game. It's developed by organization called CIAC. Students should come up with idea, identify problem, the solution for that problem, then they should start to develop budget, marketing, etc. The business game was optional for students but they received some credits for that.

Entrepreneurship module ELVIS is embedded in different disciplines. How do you tailor it for so different students?

Yes, the enterprise teaching is being embedded in different subjects, disciplines and it must be customized, made different for each subject. It is very important to give examples which are relevant to their subjects. When we were teaching sociologists we used different approach, instead of focusing on commercial enterprise we put more emphasis on social enterprise because sociologists will be more interested in social enterprise.

Can you select from this list 5 skills that you find most important for an entrepreneur? And can you explain why these skills are important?

1. Recognizing and seizing opportunities
2. Planning and organizing
3. Strategic orientation
4. Market orientation
5. Self-confidence

The previous university, in Aston University, Birmingham, I worked in entrepreneurship module and we put strong emphasis on opportunity, exploiting opportunity. We emphasize planning and organizing. Strategy and Strategic orientation is important as well.

Market orientation is very important to really understand your market and to be very focused on it.

Self confidence... You can't really teach people how to be self confident but they can become more confident. But it is very important... People who are not so confident they maybe are less risk taking.

Are there more skills which you would like to add to this list which are important for entrepreneurs?

Yes, probably risk taking.

“TO BE ENTREPRENEURIAL YOU MUST SEE OPPORTUNITIES”

(D.Collins.)

Name of the person being interviewed: **DENISE COLLINS**

About person: Societies & Enterprise co-ordinator

Date: 28.04.2008.

Educational institute: Queen's University Belfast



You are working in a new Enterprise centre. What are you doing there? Organizing, for example, different seminars?

Yes, exactly. This is **extra curriculum** side of things. We try to encourage students to think about enterprise and to study this. We want to promote their businesses ideas. We want to demonstrate, to show what kind of businesses is set up and things like that. For example, last week there was a guest speaker who was talking how to start up a business. So it was some kind of **eBay training** that finally students can actually set up their *eBay* shop.

It is all about some kind of **active learning**. It is really interactive - to get them involved, supporting them. That's one of the things we are talking about.

Can you tell about activities which you are doing? What kind of events you are organizing?

I can give **business advices** to students for their ideas if they want to start up their business (for example, what to do, where to start, etc.) or we can look for ideas and things like that. They are emailing me and then we arrange the meeting. Also we organize **seminars, trainings** like *eBay* training.

We will organize some kind of **intensive training programme** for students, hopefully from new academic year, September - October. We will invite guest speakers from which students can learn how to start their business step by step. It will be some kind of short introduction on starting their business.

Next year again we will organize **Big idea competition**.

Also we are trying to get in **SIFE**. It is about student social enterprises. SIFE is an international organization that mobilizes students around the world to make a difference in their communities while developing the skills to become socially responsible business leaders. There is address where

you can look at this: www.sife.org Students take on **projects** and they are **leading them nationally between universities or internationally**. With this project students can go to Ghana or other places.

How long you are working here?

This place is open just from November and I started this job about Christmas time. This centre is Queen's centre; it is part of Students Union.

How you use this centre during day?

We try to use this centre as much as possible. David **takes some of his classes here**. Headstart Programme classes had been held here as well. Societies use it a lot, for example, Drama society. The rest of student body can come and look what's going on here.

What kind of difficulties you face up?

It's **hard to engage students in extra curriculum activities**. Students have a lot of work, they have a lot of work with studies, exams and it is very hard to involve students in extra curriculum activities. That's why we try to do things like Big idea competition. There are no restrictions on it. It is open for all students. It doesn't sound threatening. It doesn't sound that there is something to do with studies.

I think David and Aisling helps to advertise these extra activities during the lessons.

We work together with Aisling and David because basically **we have team agenda**. So that's why we must communicate each other to promote each other services.

What can be the benefits for students from this extra curriculum? Why they need to come here?

You need to do something more then you get in University. You need to have other skills to show and prove to your employers. You can write in CV about seminar, for example, about *eBay*, starting your own business programme because competitions for graduates' jobs are big.

What do you think what's student opinion about this centre?

To be honest I think they like what we do. It was just opened. Every weekend we try to inform students through their emails just to get a brand, logo to let people recognize it. It's definitely very difficult task to let students realize the purpose.

You are connected with entrepreneurship education in Queen's University. So how can you define entrepreneurship?

A lot of people, especially students try to think that it is about starting up a business. But I think it is no necessary to do it. It is **more about skills** which you can use in your hobbies, studies, career, whatever maybe. You must be entrepreneurial to get a better job, for example. It is all about recognizing resources that can be available for you and to take advantage from using these resources.

Can you select from this list 5 skills that you find most important for an entrepreneur? And can you explain why these skills are important?

1. Recognizing and seizing opportunities
2. Vision
3. Communication
4. Market orientation
5. Analyzing problems

First I put *seizing and finding opportunities*. Students who came to *eBay* seminar or we had ideas generation workshop as well, they came with no ideas but after they have realized that there are a lot of opportunities, a lot of ideas around them. It means: to be entrepreneurial you must see opportunities. The difference is that an entrepreneur sees the opportunities and tries to do something with them. Extra curriculum just let students to know that there are a lot of opportunities around them. **It just opens the creative side of your brain to recognize them and know that you can do something with it.**

Communication. A lot of things we have done in University are focused on it. Students have to communicate their problem, idea, they must present it. I think it is very, very important in terms of being entrepreneurial, in terms of university, going on to get a better job. Your skills are important.

Market orientation. Well... everything we do, we try to look at: are there any customers? We look on global aspects. Idea competitions were very much focused on it – students should demonstrate are there any customers for their product.

Analyzing problems and *vision* is very important. In all activities what Aisling and David do they try to focus on it. Also in extra curriculum we try to do it. Entrepreneur look in ahead of other opportunities are there as well.

Are there some other skills which you which you would like to add to this list?

Yes, perseverance or patience.

You are improving your skills as well. You are going to other universities to look on their practise.

We are going to Leeds University to see the best practise what they are doing. I think you have to go away and see what people are doing, what works and what doesn't work. One thing we notice was **competition**. They had one week time in which they should make more money, as much as possible. That's good idea to do something like that. But also I think we can have tables here, **make a market** and let student rent table for £ 10 and they can actually sell their things. It would be something different. We can give them furniture, bring them tables....Well... it's another potential idea as well.

“WE ARE CREATING ENTREPRENURIAL WORK FORCE”

(R.Millen.)

Name of the person being interviewed: *RICHARD MILLEN*

Date: 22.04.2008.

About person: Head of Regional office

Educational institute: Queen's University Belfast

How can you define entrepreneurship?

It is whole thing about being creative, about being able to solve problems. If you gone go and don't have resources, can you find resources and make your dream true. It is all about having a vision, knowing how to get there, being creative and innovative. It's about being entrepreneurial.

Entrepreneur is connected with new venture creation. But being entrepreneurial could be some kind of hobby you have, you can be member of some organization, it's not about what you are doing because you can still be entrepreneurial – **bring your own ideas, being creative.** But entrepreneur is about bringing all of it to starting up a business. So that's my definition.

Tell me more about NICENT! How did this entire thing started with ELVIS module...

NICENT was established about 2000. This is government initiative to make students more employable, more entrepreneurial. It was actually government funded competition where universities put their proposals in terms how they would develop entrepreneurship at their universities. So we joint proposal with University of Ulster. We were one of 13 groups of universities. There were 13 different university partnerships. We decided that we will try to **embed entrepreneurship in curriculum in undergraduate level.** Other universities did other decisions – some decided to create masters on enterprise or some might develop an enterprise centre in university, it might be extra curriculum activity. We decided that our main role will be to put it into curriculum.

You were the only who decided to embed entrepreneurship in curriculum?

Yes, we were. But it was very, very difficult. Our first view was that we would create a new module... just to introduce this module into their curriculum. It wasn't possible. They were saying that **curriculum is too full already to come with a new module in.** So what we decided to do was **to find gaps within the curriculum, in existing modules where we can go** and find 8 hours of teaching in a semester, or 10 or 12 or 14. And we said that we will provide that teaching. So we employed David and one other on that time. At that time it was Science and Engineering, now it is over across the university. **David looked for modules that maybe already have a little bit of**

entrepreneurship in them. So he thinks, for example, of engineering project where students were already designing a product, for example. So he was saying: “Why not to take a stage further and write a business plan for that product? You will have new experience!” So that’s the beginning.

David used **different approach to every discipline**, like for Environment and planning, it was something like - how to set up an architect office. For nursing: how to become more entrepreneurial nurse. So for each different discipline he tailors the teaching but still based on the same learning outcomes. That’s how we tended to get it accepted.

Really for first couple of years we delivered very little, I think maybe on our second year we had 87 students. We are now delivering entrepreneurship education to over 2000 students each year. That’s the growth. The key to it was providing David and the other person on that time.

Why this course is important for all students? Why you want to embed this course in curriculum for different disciplines?

Students who are starting up their business are very small percentage of all students. But they **all want to be entrepreneurial, all want to be creative and whatever job they will get, it is important for economy.** We just don’t want robots that go in companies and just continue doing the same things because these companies will die. We got **students who go into the companies and get them new ideas, get them new ways of doing things; some sort of stimulation to do much more. What we are really doing is creating up entrepreneurial work force** and hopefully some small part of these students will start their own businesses. We are creating entrepreneurial people.

What’s the feedback from students about this module?

It opens minds; stimulate people to be more creative. I think it works. They are changing attitudes that it actually having an impact on them.

What are the strong points of this entrepreneurship module?

Strong point is **delivering.** You have seen that David is exceptional with students; it is totally **different experience** for them. Students find that kind of approach very good. We always are getting **good, positive feedback.** It is **interactive and innovative approach** that David takes to the teaching. And the other thing is that it is something different for students. It’s more **exciting, more stimulating.** I think they don’t believe they can be creative and David came with opportunity to become creative. Some students are amazed and ask questions. It is different experience for them.

What are the weak points of this entrepreneurship module?

It's **not been into curriculum.**

There will be a number of those students who will want to carry on, maybe on start their own businesses or at least still be involved in some sort of processes and maybe in 5 years they would like to set up their own business. That's the different resource agenda. You need someone who is working with young people. So we **don't have human resources** to doing something like that.

We run good extra curriculum things but it's really not enough. The weakness is just not having resources to follow through a lot of that staff.

In Queens are extra curriculum activities connected with entrepreneurship. Can you tell about it more?

We run programme called **Headstart**, its outside curriculum. There are about 15 or 20 students going on that. Even if it based on writing a business plan, we give small fund and it will be a business. We get them to **speak with other entrepreneurs**; we are doing **idea generation classes**. It's more fun than serious but still a good experience. We run 14 of business ideas, brilliant **business plans**; they are doing their pitch tomorrow. The plans are ok, but it's not about new venture creation, they must build their confidence and present their ideas. It's good learning experience.

On Monday we are doing the **Big idea competition**. We came up with 12 categories for ideas – the best idea for environment, the best idea for service, the best idea for product and so on. Like 12 categories and prize for each. We just asked to come up with ideas. We have about 100 responses. At the moment we want to engage more and more students outside the curriculum.

We have **enterprise centre** in Student Union. We can use for sessions with bringing various speakers. Recently we had a guy who was talking to students how to set up an *ebay* business. We just try to engage as many people.

Why students are participating in these competitions? What's the motivation?

We offer financial award – 100 pounds for each category in Big idea competition. And there are 100 business ideas in this Big idea competition. Then is Business planning competitions which are funded and run by other organizations and we try to encourage our students to go there as well.

Are there a lot of people in Northern Ireland who want to start up their business?

I think there are 12 or 13 regions in UK and Northern Ireland is probably on the bottom – 2nd or 3rd of these regions in terms of percentage of population starting up a business. We are not good, we have very low rates.

There is negative attitude about starting up a business. It should be made more positive. People in the school they never talked about option to start up a business. They always said: “Go and find a job.” It’s culture. Give them an option!

What do you think why people don’t want to start their business?

This is the risk obviously. The part of risk is that they don’t know what the steps are. We are trying to help them - what the networks are, etc. We are not waiting very many students to start up their business but maybe at least they will know the basic - what business plan looks like, what steps they need to take to set up a business, with whom to talk, etc. We hope this module will encourage students.

Can you select from this list 5 skills that you find most important for an entrepreneur? And can you explain why these skills are important? Can students improve these skills during ELVIS module?

1. Result orientation
2. Recognizing and seizing opportunities
3. Self- confidence
4. Market orientation
5. Emotional stability

I suppose these are not skills you can learn particularly; it is partly your personality, your experience.

I put **result orientation** first because it means you have aim to walk, you result you want and you will gone go for it. To do it you must look for **recognizing and seizing opportunities**. You need **confidence** to do it.

Market orientation is something you can give them in the course through market research. This is crucial as well. **Emotional stability**, if they don’t have it stability, they won’t do anything. Maybe it should be on the top.

Are there more skills you would like to add to this list?

I think you need financial skills.

THINK LIKE AMATEUR AND IMPLEMENT LIKE A PROFFSSIONAL!

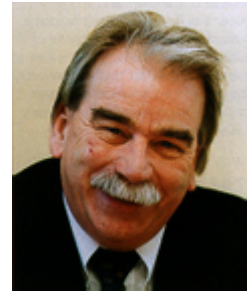
(T.Newsom.)

Name of the person being interviewed: **TREVOR NEWSOM**

About person: Director of Research & Regional Services

Date: 28.04.2008.

Educational institute: Queens University Belfast



What's your task in Queen's? What is Research and Regional Service doing?

The Director works with university, for university, as part of university - trying to look at how university thought its various activities can contribute to leading economic growth within the region.

It's an international university and what it does is: up the highest quality, put the **emphasis on research**. It can look at **how every research is transferred into economy** and that's about what we are doing.

We played a great store on both – developing the concepts of academic entrepreneurship and also student entrepreneurship. Student entrepreneurship agenda was supported by UK government initiative and was called The Science and Enterprise Challenge. We received some initial funding to **develop the Northern Ireland centre for entrepreneurship and part of that was to introduce entrepreneurship into to curriculum for Science and Engineering**. The reason for doing that... there was a lot of pressure to have a new module or do a web faced module. One of the things we felt was - the nature of Engineering and Science courses is so specific that you can't simply have an extra module. What we needed to do: to integrate it into the curriculum. We recruited David and another teaching fellow. David has been as a champion for young people on entrepreneurship. He was an ideal person to look at how it can be developed in university.

What kind of activities you are doing in Queen's to improve entrepreneurship education? And what kind of problems do you face up during the introduction period?

The first was work with undergraduates; the aim was to integrate this entrepreneurship module in curriculum. It is complemented with some of other **extra curriculum activities** in terms of business planning exercise.

The university has made further investment in **employability skills** subsequently. The **new enterprise employability centre in Student's Union** is evidence of that. Now we are extending

that enterprise element into humanities and social sciences. Already we have some mechanisms which we perhaps haven't used as much as enterprise training we should have done.

We have a **Science Shop which is Dutch module**. It gives people project work as part of the curriculum. I think we would need to look at that more for intense to employability skills as we go forward.

We also face the problem that traditional concepts of enterprise in **science and engineering rely very much to products**, processes, inventions whereas in humanities it's often related to services and it is very difficult to develop things on services. **When you get in humanities it's often about being self employed rather than being employed in a company**. Those are the areas we are starting to look at.

That's why we introduced **Dragon's Den** into humanities because it gave us an extra curriculum activity and it also gave us a focus which is more about "how do I get ready for self employment". If you look at some of the big London universities, like London school of music, then they have more than third of their students becoming self employed within the year. It means entrepreneur skills becoming important.

We also have been starting to run between NICENT and this office, between David and this office, **academic business planning exercises**. And as well as having business planning exercises for academics we also introduce **idea generation courses** because one of the problems is: you need people to have ideas. And if you don't **create a culture where they can think freely** then you can't necessarily get the people going through to come up with business ideas that you can then plan. That's one of issues that we need to deal with.

We tried to pilot here. We probably created a culture. We are happy to see experiments and I think that's a part of **demonstrating innovative culture** because you can't encourage innovation if you, yourself are not well prepared to innovations. The curriculum innovation that David has achieved is significant. The structure innovations that Richard and his team have made are important. The whole culture we created.

Another thing... it's probably one of the few areas in university where all of the **people making a contribution see themselves as working with one aim**. Involvement of parts of Career Service, involvement of Science Shop, involvement of NICENT, involvement of Regional Office, involvement of Employability Centre... **All comes together**. This is one of the things that has been is quite useful.

Another thing is that we are **moving to environment where the emphasis is very much on not how we transfer the knowledge but how we make money from knowledge**.

What are the strong and weak points of ELVIS module?

The weak point is that we have embedded it in curriculum but it is delivered by David. What we have not got... a lot of people in department actually delivering entrepreneurship. So we are trying to create an entrepreneurial culture, an enterprise culture in the schools but **we do not have academic staff in the schools who could deliver the sorts of learning outcomes as David delivers**. That's probably the biggest weakness.

When David teaches he gets some money from the school for doing the teaching. There is natural tendency within the school - they want to take that money back into the school. That I think is a big weakness.

Last we have embedded it in a curriculum. **We have not fully embedded** and that's the support of concept within schools and within academic staff teaching in the schools. I think that's the weakest weak point.

I think in other institutions where they have a separate module they have given separate awards. That in some cases gets a student come along. We have used some other awards along the way. We are running this fine line between making module as extra curriculum or making it totally within curriculum. If you are making it totally within curriculum one of the problems is: how curriculum is modified on annual basis. If it being delivered by David it is probably changing. If it starts get taking over by the school it probably won't have the innovative flew that David provides.

The strengths... The most important thing we did... When we decided to do this we decided it was gone be permanent and it wasn't gone be temporary. One of the mistakes other universities made was they found people like David and they gave them short term contracts, with no security. So if they found someone good, they left. When **David came, he got a 3 years contract** and as soon as we appointed, we simply extended David so he was permanent. **And the fact that we made this thing permanent is really a key**. If you don't have that security, the good people will leave.

The other strength is the way in which we have been managed the project. It has not been managed in a directive way; **it has been managed in a responsive way**. The leadership and commitment has been given without providing a straight jacket for what David can do. No stage in a management we have discussed details of the curriculum. That's have been a motive David had in a school. All we have said is that we want to embed it. We haven't said what it is; we said some learning outcomes of this. So I think the way we managed it, we would regard as 'light touch' but with the very strong commitment. It is probably the key.

Do you think that cooperation between academics from Management schools and David should be bigger?

Well... the answer is NO because basically the rest of the Management school academics can't be as innovative or as committed or as up to date as David. The fact that David is in Management school mainly reflects when we started this.... I can't employ academic staff. So we had to find the home for him. The deal was done to find the home for him with an exchange of funding. The consequence was that the Head of school did not interview what the David did. Actually David was working in environment where he was not subjected to normal constrains of school of Management. It gave him great freedom and gave us much better results.

What are your plans in area of entrepreneurship in Queens?

We run competitions and one of the things what some people measure is: whether we won't loose. I don't. **I measure how many people take a part.** One of the things **we must start looking at is: what's the consequence of what we deliver.** Because we are talking about learning outcomes but if we are talking about the students becoming more employable **we should be able to see that in a numbers of getting jobs.** I think at the moment what we haven't worked yet is: What we should be measuring? We measure at the moment whether it is in the curriculum; **we haven't got a stage where we measure whether or not it's having an impact on student.** I would like to start to look on impact on student because I think it will inform us more about changes we need in a curriculum. **So the next stage is not one of quantity but about quality.**

One of the things we will be moving to as we go forward will be **how we actually can encourage our students to be more creative,** particularly in Science and Engineering. They are learning rules, have materials and things on but then you put them on top and ask what they want to do.

The Japanese man once said to me technique for supporting economic growth: **“Think like amateur and implement like an engineer or professional!”** In other words: Be creative, break rules! But when you come to implement it, make sure that it works. I think we concentrate a lot on enterprise about understanding of business, how it works but what we don't have yet: **how we stimulate creativity and innovation.**

“SUCCESS LOOKS VERY BAD UNTIL IT BECOMES SUCCESSFUL”

(P. N Lioulias.)

Name of the person being interviewed: *PANOS N LIOULIAS*

About person: Chief Executive, QUBIS Ltd

Date: 30.04.2008.

Educational institute: Queens University Belfast

Tell me please about QUBIS Ltd structure!

QUBIS actually is an independent company. I am not employed under University and no one from University is in my organization. The connection to University is that we commercialize, we are doing spin outs from things which comes out from university, which has some association with University. Number two: the University owns us for 100%. We have independent board as an independent company; we have powerful business people who have experience with start ups. That's how we balance the commercial world with intentions that are naturally coming out of institutions - University institution. University is an institution, that's not a business.

How many people are working in QUBIS Ltd?

We are very small. Only 2 and half people are directly working here including me. I am Chief Executive, investment manager, also I run 2 funds – Development fund and the University Challenge Fund (I am the fund manager of that). There is another guy who works full time with me and there is another person who has a long experience but he is only for half of time. We have also office manager who gets things out for us, make agreements, etc. That's a full time staff. We have part time secretary and that's it. From outside services we use accounting firm, we have relations with law firm. That's the size.

Tell me more about your activities! What QUBIS Ltd is doing?

We are doing spin out companies from Queens. We are doing spin outs from spin outs. **We create the companies.** Companies which come out from Queens, we call spin outs. We are working with researchers, PhD, people who are working with projects, which have some kind of discoveries, ideas, knowledge and they think they want to do something with it. They come to us and we help them with transition. We bring their intellectual property into the company and help to start. We help them to start their own business. We manage also something at UK government, the University Challenge fund. We don't licence companies, we don't do contract or consulting work. The only thing is companies. We cover on costs actually.

What's in QUBIS Ltd unique? With what you are special comparing with other similar organizations?

There is a belief that **we are probably one of the first who are doing spin outs in Ireland and UK. We are the first who invest money in these companies.** We put money behind the company. We operate like a business. It makes us different.

We are independent since 1984 as a company as I told you – with an independent board, etc. QUBIS has been here even before. It was called Queens University Business Incubation Services. Actually firstly it was called Queens University Business Industrial Services. I don't like word "incubation". I think it is dirty word, it was used and misunderstood.

We used to be inside the university and then we became an independent company in 1984. **We created more then 50 companies.** We had large once and small once. For example, Kainos Software Ltd has about 200 people, Andor Technology PLC about 200 people, etc. Also we created big companies like Lagan Technologies Ltd, Amphion Semiconductors Ltd, Fusion antibodies Ltd, etc.

We are one of those exceptions who do make money. The money we put in, we make much more coming out. It's not easy because people want to invest, start up companies. University put target and we don't believe to it. They are saying: "Oh, you guys are bad because you started just 2 companies this year." What ever we are doing, people are not happy. But people don't understand, even some shareholders, representatives. **They want to get numbers. But if they will get numbers, they won't get the financial results.**

You financially support companies. In return to it you receive shares from these companies?

Yes, we are holding company for University. We do holding in these companies – from very small once to very large once. For example, Kainos Software Ltd has 15 000 pounds in sales; we have 39% of it. We are in the board. We are in the board for all of these companies actually. We do shareholdings. The lowest once are less then 1%.

After giving money to these companies, you still look what they are doing and give them advices?

We try. We can force it. We have a lot more influence than other similar organizations in such cases because we know these people before, we know them quite well – their weaknesses, strengths. A lot

of them are quite grateful because we did support them where no one else would. We have more influence than Equity Company usually hold.

What about failure? Do you have a lot of failure?

Of course there are but we don't have a lot of failure actually. We have created about 50 and we have 32... A lot companies which we have created were insisted by government. **But from our pure portfolio failure is very low.** Usually failure rates are 9 out of 10, we have much, much lower rates. We are investors in really early stage companies and we are one of the few who makes money out of it. Even from the venture community.

What are statistics, turnovers for QUBIS Ltd? What about most successful companies which you have created?

Turnover of our companies are £74.8 M and we employ more than 1000 people this year. Those companies attractive £ 60 M of outside investors, venture capitalists, angels etc. There is large proportion of new tech companies in Northern Ireland. And it is a lot and unusual, maybe because of history of this region. We had one Andor technologies in December 2004. We still have 5% of that company. We do make money. One of our successes is Amphion Semiconductors, they were bought by Conexant Systems in June 2004 and part was sold to another company just 2 days ago. APT (Audio processing technology) - we found it and we sold it. Another companies like Avalon Instruments Ltd, Biocolor Ltd, Fusion antibodies Ltd.

I was wondering how QUBIS Ltd works. For example, I graduate in Queen's master studies and decide that I want to start up a business. I come to you with idea and you are asking me questions, why I could be successful, etc. If you think I can do it, you invest in my company?

Yes. Usually here come people from PhD level or some researchers. We are also opportunistic. We are not like regular business would be. We do spinouts from already existing companies; to make them better because they have already commercial understanding and things like this.

Do you support new companies for 100%?

We are one of investors. But at the beginning we are the only who put the money. Later other once comes and we take step back.

You give financial support at the beginning and also in the case if persons want to extend their business?

Yes. **We always must be pioneering. We are number one in the UK and Irelands in the revenues of spinout companies. We are number two in employment.** We have good track record. One part is that we are opportunistic, we try to be flexible. Another part is difficult environment in Northern Ireland. Maybe because environment is so difficult we should found another ways of doing things. **We keep ahead and try to be more pioneering.**

I do follow to my companies because I put money in these companies and these are large amounts. In last few years we put more than ever been done. Now we try to make it more like a business world. **Inside the people should be run like a business. They make success and they should be part of the success.** That's what we are working now. Other organizations like us don't have it. This is my business.

So you are working only with people who are connected with Queens? Not with people from city?

Well... if there are some relations they have with University, like we would support spinouts. There are small companies who are interested doing some things with technologies. We try to bring some people to help them out. **We try to explore other business manages and try to see what we can do.**

Are there a lot of such companies like QUBIS Ltd in Ireland and UK?

Now it becomes fashionable what we did in 1984. Now everybody wants to do it. That's why I am saying **we must be more pioneering.** Some of them done public, some of them sold some things in market. So they get money. We don't like that model. We don't believe in it actually. We want to keep open model. We want to work with everybody. Anyone who comes with good ideas, we want to work with them. We don't want exclusives.

We don't want to go in public and get money from stock market. First of all we don't have such size. We are not Oxford or Cambridge or London University. It doesn't make sense for us. Also you must think how to make money afterwards because 20 minutes you can have a lot of money but when you start to work with it, after 5 or 10 years there will be how much? Zero? And then what? Till we sold these companies we didn't have money. That's why we try to be financially independent for everyone. That's our goal for now.

In next 2 or 3 years with capital we created probably we will be available to invest from the interests that we received from that capital what was put in foundation, if it was put in the foundation. We will be theoretically financially independent in investment side.

Do all universities have something like QUBIS Ltd in Queens University Belfast?

Yes. Some of these universities have departments not independent companies. It is big difference.

What's the main difference?

Can you imagine your professor running a restaurant? But I have a restaurant and I run it. **People who are in my board have been successful entrepreneurs.** They fail, they create, and they make something. That keeps the balance. What does university professor or administrator knows about business start ups? Some may know a lot, but some may a little bit. But entrepreneurs will definitely know, quite a bit. If you have to make decisions they help keep things logical and reasonable, not theoretical. A lot of times people coming from university side, sound smart, they have read a lot of books, but they don't understand the thing,. They don't understand how much time it takes, how difficult it is, even how success looks like. **Success looks very bad until it becomes successful. We have been around people who make us realistic.**

What is your guarantee when you invest in business?

No guarantee. We loose everything. We loose 100% of investments. It happens all the time. It is business.

Who are these people who come to you with ideas – teachers, students? From which faculties they mostly come?

A lot of things come from Computer Science because they need a lot of capital to start. People can put work, come get together, create groups, create software thing, can start selling services, and make their product out and things like that. They can make a contract with one company, etc. This model is very good and easy model and we can afford it. I can't make thing with Drug Company because it is too expensive. We can't afford it because at some point we can loose the money... and we just can't afford it.

So... we get from Electrical Engineering science a lot of success. Also we have some track record with some instrument companies like Andor technology PLC and Avalon Instruments from Physics.

And then we have from Life Sciences some success but not drug companies because we can't afford it. We have for example, Fusion antibodies and Biocolor.

You are doing great job. You must see through person to understand how they will work in the future – they will be successful or not.

We are more like psychologists, baby sitters (*laughing*).

What are QUBIS Ltd strong and weak points comparing with other similar organizations?

We have a **long history**. We have success, so it makes things easier for us. Also we have in **portfolio companies which are successful** and other ones who are in emerging. So we **can use our network and relationships to bring these together**. We know all these guys, we were listening these people when nobody didn't. We were with them. Now they became famous, rich and so. And if we will call them, they will take the phone call. Maybe they won't do anything but most will do. Most of our **people are very loyal to us**. There is loyalty. That's the strength we have. Maybe some who just starting up, they don't have it.

Other strength is that we are **independent company**. Also we try to keep **bureaucracy to minimum**. We really try hard to don't do stupid things we don't have to.

The negative thing – we failed sometimes. Because of bureaucracy or the process, the audits... Negative also could be - if we don't have balance between university and outside world. Negative also can be that we try to be independent and flexible. But how much flexibility do we have? It is important because flexibility creates strength. Also important is keeping credibility. Can I make a deal?

What are QUBIS Ltd plans for the future?

We try to recapitalize the company, create **different funding pulls** for different risk categories – medium and seed early development capital. For development capital we got money, we got commitment to use this money for development. The bigger companies invest the money because I need money to keep my organization going. Also this is the first year when University is paying management fees. That's good because I can use my capital for investments.

We are working to become financially independent on investment side - forever.

How many applications do you receive?

Here not coming 100 of people. No! Maybe 10 requires per year.

What's the problem? People are afraid to starting up their business?

They are naïve. That's the base problem. The motivation – everybody wants to be millionaires, everybody wants to be like Bill Gates. But they are naïve. They don't know what it takes. Sometimes it is good because otherwise they wouldn't do it. But on the other hand some people think it is so easy. But it is not. Taking the technology, finding the market, creating the company... It is very hard. Even people who are very close to this staff sometimes don't estimate it. Because maybe they did it once and they were lucky. But most people don't get lucky. We have been lucky.

E-Factor Questionnaire

Please rate yourself on a scale of 1-7 in terms of how frequently that you demonstrate the following behaviors. One is “Almost Never”, four is “Generally”, and seven is “Almost Always”. After you have completed the questionnaire, please add up and write in the sub-totals for each section. Then add up all the sub-section totals to produce a grand total.

1: Creativity & Innovation – the ability to spot opportunities and challenges to continually innovate

1. Absorbs and uses new ideas and information quickly 1 2 3
4 5 6 7
2. Sees the future with clarity
1 2 3 4 5 6 7
3. Finds new ways to get better results from limited resources
1 2 3 4 5 6 7
4. Is good at judging which ideas to develop
1 2 3 4 5 6 7
5. Comes up with a lot of new ideas and ways of working 1 2 3
4 5 6 7

Sub-Total_____

2: Outcome & Action Orientated – the ability to think strategically and to respond flexibly to feedback

1. Focuses directly on what needs to be done
1 2 3 4 5 6 7
2. Takes risks that others would not attempt
1 2 3 4 5 6 7
3. Persists when others would give up
1 2 3 4 5 6 7
4. Pushes self and others for results
1 2 3 4 5 6 7
5. Willing to bend and break the rules to overcome obstacles
1 2 3 4 5 6 7

Sub-Total_____

3: Assertion & Negotiation – the ability to get the best deal for yourself and your business

1. Effectively counters objections to his/her proposals
1 2 3 4 5 6 7
2. Is prepared to say what he/she thinks
1 2 3 4 5 6 7
3. Is flexible and changes tack to win his/her way
1 2 3 4 5 6 7
4. Has a good sense of timing
1 2 3 4 5 6 7
5. Is comfortable working alone against the odds

1 2 3 4 5 6 7

Sub-Total_____

4: Personal Marketing – the ability to market yourself and to research the market for maximum results

1. Wins peoples' attention by communicating a compelling message
1 2 3 4 5 6 7
2. Makes things happen for him/her self
1 2 3 4 5 6 7
3. Listens and notices what other people need and want
1 2 3 4 5 6 7
4. Willing to ask for work
1 2 3 4 5 6 7
5. Anticipates how he/she can meet other people's need
1 2 3 4 5 6 7

Sub-Total_____

5: Financial Acumen – the ability to manage your financial affairs strategically and to leverage the best returns

1. Soundly evaluates the financial implications of a proposal
1 2 3 4 5 6 7
2. Highly numerate
1 2 3 4 5 6 7
3. Makes realistic assumptions about the marketplace
1 2 3 4 5 6 7
4. Is constantly looking for better deals and returns
1 2 3 4 5 6 7
5. Willing to take calculated financial risks
1 2 3 4 5 6 7

Sub-Total_____

6: Leadership & Teamwork – the ability to lead teams and projects on a collaborative basis

1. Involves others in almost all important decisions
1 2 3 4 5 6 7
2. Builds on other peoples' ideas
1 2 3 4 5 6 7
3. Takes responsibility for tough decisions
1 2 3 4 5 6 7
4. Lets people know where they stand
1 2 3 4 5 6 7
5. Creates a compelling picture of the future
1 2 3 4 5 6 7

Sub-Total_____

7: Personal Mastery & Confidence – the ability to master your own beliefs and emotions as a resource

1. Recognises and learns from his/her mistakes
1 2 3 4 5 6 7
2. Takes criticism well
1 2 3 4 5 6 7
3. Composed when taking risky decisions
1 2 3 4 5 6 7
4. Makes sound decisions quickly
1 2 3 4 5 6 7
5. Seizes opportunities
1 2 3 4 5 6 7

Sub-Total_____

8: Networking & Selling – the ability to influence events and others by selling and communicating

1. Sets his/her proposals in the wider business context
1 2 3 4 5 6 7
2. Is aware of rival products and competitors
1 2 3 4 5 6 7
3. Acts with customers in mind
1 2 3 4 5 6 7
4. Good at sizing people up
1 2 3 4 5 6 7
5. Gains support from others
1 2 3 4 5 6 7

Sub-Total_____

Grand Total_____

Nursing Commercial Enterprises Ltd

Management Trainee - Nursing

£30,000 - £37,000
+excellent benefits package

Our health care department is currently looking for an innovative R.N. to join our company which provides 24hour care to the private sector through our nursing home and domiciliary care agencies. The ideal candidate should hold a relevant nursing qualification, utilise professional skills and be capable of working in teams.

During the initial training period of 18 months the successful candidate will have the opportunity to participate in various projects with other trainees.

If you think that you can rise to the challenge and are attracted to a working environment that genuinely rewards real achievement and innovative thinking please apply to:

On completion of a successful interview you are employed with 5 other management trainees and are told that the company is developing a new range of innovative services and products to improve the health and social care of learning disability clients in Northern Ireland. The long term goal is that the products and services developed could be sold commercially.

Tasks

A written record of these tasks will be submitted at the end of the session for assessment purposes.

1. As a group compile a list of at least 10 health and social care deficits faced by the learning disability population, which you feel are not dealt with adequately within the present health and social care system
2. “Brainstorm” and come up with a list of 4 services and 5 products which would possibly help with meeting these deficits
3. Would any of your products or services work if provided by the commercial sector?
4. Select your best product and best service which could be developed by Nursing Commercial Services Ltd. Rationalise your choice.
5. Outline 5 ways to make all staff within Nursing Commercial Services Ltd more innovative.

LET'S DO IT FOR THE TEAM

Colm has just finished his PhD. He has just come up with a new sensor which is able to detect the calorific content of any food which was specifically based on his research. There has subsequently been great interest in his product and all the relevant agencies have been providing funding to patent, prototype and market research his product.

There is enough funding to keep the business going for a year and as part of the package Colm has been awarded a £200,000 salary grant for management in the first year. Word gets out and Colm finds himself inundated with applications from both in and outside Queens with students, academics, friends, relatives and several junior business people forming the main candidates. Colm is not sure that he can even go ahead with the selection as he has not even advertised yet. He has until next Friday to select his team and has been told by his advisors that the business should earn one million next year and has high growth potential in the US market. With a realistic target of 40 million turnover by year 4 Colm has decided that he wants a marketing manager as well as managers for finance, operations and human resources.

He has narrowed it down to six people and needs your advice to make the final decision.

1. His best friend Chris who left Queens last year and has travelled around the world. Chris needs a high paying job to pay off his student debts. Colm knows that Chris is very talented but tends to hog the show.
2. Teresa Simpson is a qualified accountant and has been preparing accounts for clients for a number of years for company's house and the tax office.
3. Clark Kent has been an operations manager for 30 years for the local tyre factory. He has received awards for business excellence in the annual tyre company awards.
4. John Torney is a failed entrepreneur who has started 3 companies and now needs a job to pay off his debts of £200,000. He seems very dynamic.
5. Karen is another friend who has spent two years after her degree running for the Students Union.
6. Colm's lecturer in Entrepreneurship wants to be marketing director as he previously ran a chain of restaurants in Northern Ireland.

TASKS

1. Advise Colm on the best team to pick including roles and salaries?
2. How could Colm assess who were the team players?
3. How could he build the people selected into an entrepreneurial team?
4. What types of people are missing from the ideal entrepreneurial team?
5. Colm believes he does not need a leader and they will be "team based".
Do you agree with this?
6. What problems will this team present in the long run?

“DRAGONS DEN” ASSESSMENT SHEET

| Group Name → | | | | | |
|--|---|---|---|---|---|
| Criteria | <i>(Please circle appropriate score & provide comments)</i> 1 “Not Strong” and 5 “Very Strong” | | | | |
| <p>1. Strength of New Venture Idea (30%) <i>(Creativity & innovativeness, growth potential)</i></p> | 1 | 2 | 3 | 4 | 5 |
| | <u>Comments:</u> | | | | |
| <p>2. The Market Opportunity (20%) <i>(Clarity of target market; Extent, quality & relevance of market research conducted; Marketing mix – appropriate use of 4Ps to reach the target market identified)</i></p> | 1 | 2 | 3 | 4 | 5 |
| | <u>Comments:</u> | | | | |
| <p>3. Making It Happen (20%) <i>(Financial, Team & Operational Issues)</i></p> | 1 | 2 | 3 | 4 | 5 |
| | <u>Comments:</u> | | | | |
| <p>4. The Pitch (30%) <i>(Selling the idea and dealing with questions)</i></p> | 1 | 2 | 3 | 4 | 5 |
| | <u>Comments:</u> | | | | |
| <p>Overall Comments & Mark</p> <ul style="list-style-type: none"> ➤ Excellent pitch, coherent, clear and well structured. Has used a range of presentation media and/or tools in an appropriate way. The presenters have enthusiastically explained the project & content was relevant & used effectively. (4-5) ➤ The pitch may have been a little dry in parts and there was some awkwardness. Not all content was considered relevant. There may have been some weaknesses in the selection of content and the presenters failed to tell the dragons some key information. (2 – 3) ➤ The presentation was quite weak, with little coherence or structure. The presenters found it difficult to explain the project. Considerable key information was omitted from the pitch. The dragons did not have clear awareness of the project. (0 – 1) | 1 | 2 | 3 | 4 | 5 |
| | <u>Comments:</u> | | | | |



*Your feedback
is important
and greatly
appreciated*

**ENTERPRISE & ENTREPRENEURSHIP
EVALUATION & FEEDBACK**

| <i>Please tick the appropriate box in response to the statements below</i> | | Strongly Agree | Agree in part | Neither agree nor disagree | Disagree in part | Strongly Disagree |
|--|--|-----------------------|----------------------|-----------------------------------|-------------------------|--------------------------|
| Module design, content and organisation | | | | | | |
| 1. | The module was interesting and enjoyable | | | | | |
| 2. | The module was beneficial to take | | | | | |
| 3. | The format of the module (lecture, discussion, etc) was appropriate | | | | | |
| 4. | The topics covered were not difficult to understand | | | | | |
| 5. | The module gave me a good insight into entrepreneurship in the 'real world' | | | | | |
| 6. | I would recommend this module to other students | | | | | |
| Teaching, learning and support | | | | | | |
| 7. | The lecturer was clear and comprehensible | | | | | |
| 8. | The lecturer gave clearly structured lectures | | | | | |
| 9. | The lecturer allowed opportunities for asking questions | | | | | |
| 10. | The lecturer was friendly and approachable | | | | | |
| Personal & Future Development | | | | | | |
| 11. | As the result of this course I have become a more enterprising individual | | | | | |
| 12. | It would be important to convey enterprise skills in the classroom to my future students | | | | | |
| 13. | The module has helped me to develop my teamwork skills | | | | | |
| 14. | The module has helped me to develop my presentation skills | | | | | |
| 15. | I have considered starting my own business as a career option in the past | | | | | |
| 16. | This module has helped me consider starting my own business as a career option in the future | | | | | |

17. What aspects of the course have you enjoyed the most?

18. What were your key learning points?

19. What (if anything) would you have liked done differently?

20. Please provide your overall comments or suggestions on the program.

If you would like to be placed on our alumni list and receive regular updates concerning entrepreneurship, please provide your details below or email them to david.gibson@qub.ac.uk

Name: _____ Personal Email: _____

*Thank you
for your
time*

