

# ENhance Case Study

Edinburgh Napier  
UNIVERSITY

Department of  
Learning & Teaching  
Enhancement

## Themes presented:

Employability

## Programme

Biological Sciences programme suite

## Submission made by

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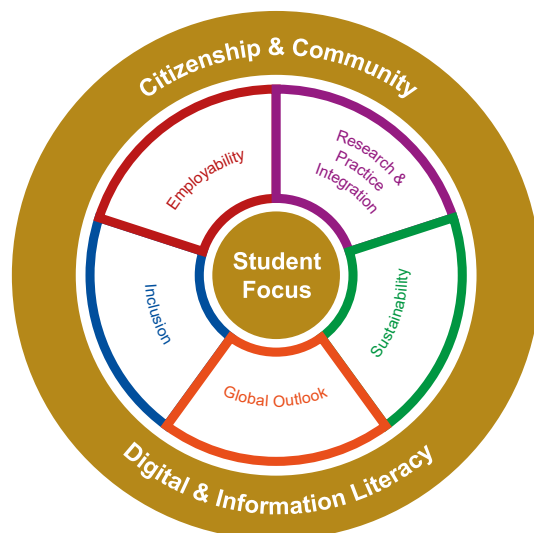
## Case Study

## Industry Advisory Groups

In the early 2010's the Life Sciences programme team were tasked with responding to the Scottish Life Sciences Strategy, which aimed to double the size of the sector in Scotland by 2020 (Life Sciences Scotland, 2011). They were asked to develop Life Sciences graduates equipped to enter the workforce with the skills and attitudes required of employees to service the needs of the sector and the abilities to develop over the period of their career. A survey of these employers in Scotland revealed problematic skills gaps in graduate applicants (Life Sciences Scotland, 2010), a significant proportion (40%) reporting issues not with qualifications, but with core skills and attitudes. Areas requiring increased professional development included: problem-solving, team working, planning and organisation, as well as the ability to self-motivate and have a positive attitude to work (Life Sciences Scotland, 2010).

Our pilot began with year 1 students in 2013/14 and key characteristics of the approach included establishing an Industry Advisory Group (formerly Employer Liaison Panel) to inform the project of current challenges in the sector and advise on embedding into the curriculum. This enabled us to share our curriculum and development plans and identify more detail about employers' needs and how these might be supported by changes within our teaching.

Edinburgh Napier University BioSciences Industry Advisory Group is now in its 10th year of running, and has been very successful as a collaboration between Industry and Academia in the following ways: -



## **1. Providing input into programmes, curricula development and industry related activities.**

Embedding skills support into modules with topic-specific context requiring input from [Student Futures](#), [Academic Skills](#) and other professional services has been important in supporting a programme of skills sessions within modules, taught in context, and linked clearly to assessment. For example, in first year, time management and exam preparation; use of Good Laboratory Practice (GLP) in lab classes for recording of data, recording of lab skill competencies. This links to the Skills Passport approach (mentioned in another case study, MacCallum and Campbell-Casey, 2017, 2018) and accreditation of the Programme Suite through the [Royal Society of Biology](#). Latterly, this has informed redevelopment of the programme suite in 2019 and the development of a Professional Practice 4th year module around skills and reflection.

## **2. Developing collaborative opportunities with students, such as work placements or on dissertation projects.**

Working with the IAG we have been able to support the running of 4th year final projects which are hosted at outside institutions with support from onsite industry staff and ENU academics. This has allowed ENU students to access industry knowledge and training and provided a supply of suitably trained workers to support ongoing industry projects. Some of the students who have been involved in these have subsequently obtained jobs with the employers involved.

We organise regular "Insight Days" where employers provide insights to their company and the types of work and jobs that are available with them. In some cases, this can also be linked to site visit at the company.

Another example has been the development of short courses with employers, providing CPD opportunities for our students, and students from other Universities. The [Advanced Therapies Skills Training Network \(ATSTN\)](#) upskilling programme supported by [Charles River Laboratories](#) and the [Cells and Gene Therapies Catapult](#) was developed as a collaborative effort and ran over three separate week-long periods during 2022. Students learned industry-level skills that they could then add to their CVs. Current work focuses on a 2nd year module in Volunteering and Employability, we are in discussions with employers who might act as hosts for placements. For example, we currently have one 2nd year student with Charles River Laboratories, and they are looking to provide a similar opportunity for other students.

### **3. Sharing graduate roles and supporting Edinburgh Napier talent into pipelines.**

Employers have been very happy to share the expectations of the roles that they offer to graduates; providing "A day in the life of..." examples and giving feedback on skills interventions and The Skills Passport (having been involved in pilot evaluation of this tool). Employers are therefore aware of the skills agenda within ENU, and the support and development of graduate skills that they can expect our applicants to have been exposed to. They have been positive about interviewing ENU graduates because of this.

Employers also share job opportunities directly with Student Futures members of IAG to be circulated out to relevant student groups.

### **4. Developing opportunities for knowledge exchange and research.**

We are currently working with [Roslin CT](#) to develop a short course on Clean Room roles (Tissue Culture) which would be made available to groups of UG and PG students across our programmes. The Scottish Centre for Contamination provided a short CPD course on Clean Room setup (August 2023), which was accessed by our technical staff (to help them to support further Clean Room developments) and some of our PG students (to add to their CVs).

### **5. Providing the School with insight into current skills requirements in the sector.**

Skills mapping exercises are carried out regularly with sense-checking through the IAG to see where there is drift and confirm that what we are offering meets the needs of the sector. Transferable skills are still high on the agenda, and there are also topic specific skills which are currently still in demand, such as Quality Regulatory Systems and documentation, Tissue Culture Techniques, and assessment of lab competencies (all of which we are working on currently).

Students are encouraged to self-assess key skills (both transferable and topic-specific) and to reflect on gaps to plan their own development of these. For example, in Professional Practice (BMS10107) students write reflective blogs which link to an assessment writing a CV and cover letter, and an oral interview. This links closely to the Skills Passport approach (see additional case study). Students are also

exposed to information about the variety of job opportunities across the life sciences sectors to widen their views in terms of possible job destinations.

## **6. Developing networks across the School for students, staff and graduates.**

Many of the staff in our IAG take part in regular Careers events arranged by Student Futures where they are available for networking with students from across the School. Staff and students are encouraged to set up LinkedIn profiles and to link to staff and each other to start building networks. Where they have access to employers (e.g. Careers days), they are encouraged also to link to them on LinkedIn. The Professional Practice module has set up Alumni panels using graduate students accessed via these networks to speak with current students and share their journeys into work.

## **7. Providing guest lecturing or associate academic opportunities**

Through the IAG, we have shared a database of modules (wish list) showing where content could be supported by industry experts providing guest lectures (or site visits). Interested employers are asked to contact relevant module leaders and discuss input. Where these have been offered, the feedback has been very positive. This provision continues to date, changing with needs and availability of support. A number of the industry experts have expressed an interest in becoming associate lecturers within the University (as part of their CPD) and we currently have around 4 working with the School of Applied Sciences, although have had as many as 12 in the past.

Work is ongoing across the School to set up additional IAGs – all currently at different stages in the set-up process e.g. Psychology, Sports and Exercise Science, Environmental Sciences and Teacher Education. The Life Sciences IAG is supporting these groups by sharing knowledge and expertise.

## **References & Further Reading**

Life Sciences Scotland (2010). Scottish Life Sciences Employer Skills Survey 2010. Accessed 25.3.15 from: [www.agcas.org.uk/agcas\\_resources/345-Scottish-Life-Sciences-Employer-Skills-Survey-2010](http://www.agcas.org.uk/agcas_resources/345-Scottish-Life-Sciences-Employer-Skills-Survey-2010)

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[scotland-2020-vision](#)

MacCallum, J. & Casey, S. (2017) Enhancing skills development and reflective practise students... New Directions in the Teaching of Physical Sciences, 12(12) <https://doi.org/10.29311/ndtps.v0i12.2368>

Campbell Casey S, MacCallum J, Robertson L & Strachan L Researching skills development: students as partners in this process, New Directions in the Teaching of Physical Sciences, Volume 13, Issue 1 (2018) <https://doi.org/10.29311/ndtps.v0i13.2881>