

Experiential Learning Vignette 3: Holistic support for Industry Impact Group Project

This vignette is derived from an interview with Dr Poonam Aulak Head of Projects, WMG, University of Warwick. It forms part of a Collaborative Enhancement Project funded by the QAA.

Background

Since its inception in 1980 WMG has always operated at the nexus of industry and academia in both our research and education operations. While our Degree Apprentices and post-experience Masters students all undertook industry-oriented projects with their employers this opportunity was not as easily accessible to our one-year full-time Masters students. This did not really sit well with the WMG ethos. We also saw some specific potential benefits:

- **Students:** would develop real world employability skills around industrial teamwork, real-world critical analysis and presenting to a wider range of stakeholders and develop their confidence in applying their knowledge in practice.
- **Industry:** would benefit from access to talented individuals to deal with real problems they face. They could also identify future employees via a long-term engagement. Through the projects longer-term collaborations in specific areas might be generated.
- **Staff:** would have the opportunity to engage with industry, enhancing their experience and helping them to keep up to date and possibly identify future collaboration opportunities.
- **WMG:** would increase our industrial profile and showcase the quality of our students. Opportunities for wider collaboration may accrue. Potential case studies going forward.

Logic and Set-up

The Engineering Council (and much other research) suggests that current graduates lack sufficient skills in a number of areas including effective teamworking and presentation of ideas. There has also been much critique of graduates not being able to effectively contribute in an industrial setting immediately on graduation. This led us to focus on an industrial group project, which we termed the 'Industrial Impact Project' (IIP) to allow students to develop these skills and capabilities. The term was selected purposefully as we wished to emphasise impact as much as academic performance. Creating this balance was the most important thing in designing the project.

We also needed to have very clear expectations for all parties involved:

Ducks, meet row

These projects need to serve both an academic and an impact purpose, so constructive alignment to those elements is important.

- **Learning Outcomes:** these explicitly include demonstration of industrial impact and a reflection on the development of their professional skills alongside more traditional academic outcomes such as the critical use of academic sources to support decisions.
- **Learning Support:** Our usual research methodology support would not have supported the development of all the relevant skills, so a unique scaffolding system was developed (see other panel).
- **Assessment:** A group industry impact report (6,000 words) demonstrates this aspect and is supported by a (non-assessed) presentation of the work to industrial partners (40% of the overall assessment). An individual academic report on the literature, methodology, design and analysis of data. This also includes a reflection on their professional development over the project (60% of overall assessment).

Scaffolding for Success

For these projects to be successful for both students and industrial partners we needed to scaffold the learning journey carefully.

- **Selection:** Students apply for the project through a competitive selection process in order to ensure the students who are chosen are a good fit. This increases chances of success and reduces the likelihood of excessive stress.
- **Personal Development:** Students have a bespoke learning package which helps them to develop the skills they will need during the project – leadership, consultancy skills, working with industry, team working, presentation and problem resolution.
- **Reflection and sensemaking:** Students keep a learning journal for reflection in action and this builds towards the reflective element of their assessment.
- **Support:** In addition to traditional project supervisors, students also have 'coaches' who are staff or associates who have experience of similar projects and can help with the practical running of the project and sense-making as things evolve. There is also a company 'mentor' for the project as a single point of contact with the company and, as project lead, I have regular check-ins with the students to monitor how they are doing within the process.
- **Practice & Feedback:** The projects have a little more of a stage-gate approach than other WMG projects; students have to make regular presentations to academics and industrialists and act upon the feedback with support from coaches and mentors. This builds skills and allows for issues to be recognised and dealt with early.

- Industrialists needed to be clear on what was an academically appropriate project, and what support they needed to offer students as well as setting reasonable expectations about outputs.

- Students needed to understand their role as representatives of the University and the expected behaviours around confidentiality and professionalism; and also be aware of the support available. Further, students are allocated a role within the project in the initial phases to avoid confusion and free riding.

- University staff needed to know how and when they were expected to provide support, and when to escalate issues if required.

We were also very conscious that these projects are not for all of our students – many of whom have little to no workplace experience and lack confidence in this context; accordingly these are optional rather than compulsory. Even the students who select the projects require significant support (see scaffolding success panel).

Legal teams are involved to ensure appropriate collaboration agreements are in place before projects are accepted (tedious but necessary).

What is Different about this?

Although industry-related or industry-based projects are very common in HE, we believe the support structures we have put in place are unusual, if not unique. The approach should help students to be able to demonstrate their achievement of the learning outcomes with out excessive additional stresses from the environment and the complexity of additional stakeholders.

The focus on impact as a necessary element of assessment, representing a substantial chunk of the overall marks helps to keep this central to the project. The range of resources and support offered ensure that the dual focus of academic rigour and impact are at the forefront of the approach.

Results & Comments

We are still at the pilot phase with this approach and a full review of the courses which have run the projects will be undertaken in September 2024. Informal feedback to date from students, staff and industrial partners is very positive with all stakeholders feeling the projects have been a success and, crucially, students feeling they have been well-supported in their endeavours.