

Teaching with Impact: The Use of Live Briefs to Develop Skills and Confidence

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Background

This report describes some of the approaches I have developed, in collaboration with colleagues and partners, to embed working with external partners across our conservation science degrees. By embedding live briefs – tasks designed to provide benefit to both student and partner – throughout our curricula, we can provide students a more contextualised and meaningful learning experience (e.g. see Lester and Costley, 2010). In my experience, many students are more motivated to finish work to a high standard if it may be fed back to a partner, and through this they gain greater confidence in their own abilities.

My strategies and partnerships are still developing as I keep learning about how to develop tasks and assignments which are feasible for students to complete successfully while being of practical help to conservation practitioners. I will discuss my underlying philosophy and provide an overview of some of the teaching mechanisms I have implemented before presenting a more detailed case study of how I have embedded live briefs into a tropical field trip. I conclude by discussing some of the challenges of implementing live briefs and the next steps that I am planning to take with some of our partner organisations.

Reasons for introducing this teaching method

There are two fundamental reasons that I have followed a largely constructivist teaching strategy. Firstly, I strongly believe that students learn best from an assessment approach which allows them to tackle real world problems. If there was one thing that demotivated me as a student learner, it was the feeling of effort wasted on assessments set for assessment's sake rather than designed to provide me with real-world context or the chance to hone subject-relevant skills.

Secondly, having worked as both an academic and conservation practitioner I have seen that student involvement can have dual benefits of providing extra capacity and skills to resource-limited conservation organisations while giving students invaluable experience of working in a professional context. Skills gaps which exist within much of the conservation sector, such as GIS and statistical data analysis, can be filled by students when the learning strategy aligns.

Therefore I wanted to find ways to embed engagement with practitioners into the fabric of our conservation courses, providing opportunities not only for our students to learn from the practitioners, but also for our students' learning to assist the practitioners.

Building Students' Confidence to Take Opportunities

Gaining employment in the conservation sector is very competitive. When I arrived at UWE we were finding that undergraduates were needing gain one to two years volunteering experience post-graduation before they could get a job. This made it especially hard for students from insecure financial backgrounds to enter the sector. The university offered the opportunity to carry out a placement year between the second and final years, but uptake among our students was generally low with only a handful of students going on placement each year despite the known benefits

(Mandilaras, 2004; Jackson, 2015). One of the problems that we identified was that the students didn't feel confident to apply for placement opportunities in conservation organisations.

As part of the core team that redesigned the existing BSc Conservation Biology to current BSc Wildlife Ecology and Conservation Science, I wanted to ensure that students were given the opportunity to build up their experience of working with conservation organisations. For example, I included a requirement at Level 2 for a minimum of 60 hours conservation volunteering, working with over twenty local conservation organisations to create bespoke projects to extend the capacity of the provider while maximising the benefit to the students.

"I don't think I would have tried for a placement if I hadn't done the volunteering in the second year. But I'm glad I did, because my placement provider have employed me one day a week until I graduate."

Martha, Final Year BSc WECS

This module commenced three years ago and anecdotal evidence suggests that it has been an important factor in increasing numbers of our conservation students opting for a placement year. Students report that even this relatively small amount of volunteering gives them the confidence to feel that they can operate effectively in a professional context. For instance, we have seen the percentage of students going on placement years rise from around 10-15% to approximately 40-45%. Furthermore, recruitment to the new BSc course was almost triple that of its predecessor, largely thanks to our strong focus on working directly with employers.

"There's no way I would have got my new job if it wasn't for the Masters, especially the module on Communication for Conservation."

Jenny, MSc student

The success of the new BSc provided the impetus to develop an MSc course in partnership with Bristol Zoological Society. Taught mostly on site at Bristol Zoo and delivered 50:50 by staff from each organisation, the course was developed to cover the range of skills that a practical conservationist needs from ecology and data analysis through to communication, innovation and enterprise. Students on the course now regularly participate in the zoo's national and international conservation projects, however, Bristol Zoological Society are not the only partners involved in the MSc. Each module has input from at least two external organisations and many of the assignments are designed around live briefs. For example, data gained when we teach habitat survey techniques is fed directly back to the Wildfowl and Wetlands Trust as part of their monitoring strategy. Similarly over 50% of our dissertation projects are developed in collaboration with national (e.g. Natural England, Gloucestershire Wildlife Trust) and international (e.g. Archipelagos Institute of Marine Conservation, Lilongwe Wildlife Trust) partners.

“Hi Isaac, I’ve just read your report. It’s amazing. Well done. Everyone at GWT and indeed other NGOs is going to be very excited about this.”

*Dr Kathy Meakin
Survey and Monitoring Co-ordinator, Gloucestershire Wildlife Trust*

Like the BSc, the Masters is also recruiting more strongly than expected and is capped at 35 students to ensure a good student experience. Our first set of recruitment data shows 100% of students gaining employment within the conservation and ecology sector within six months.

Case Study: Madagascar Field Trip

In 2015, I developed a new tropical field trip for final year undergraduates. I decided early on that the trip should be undertaken in collaboration with local partners, involve students from the host country and expose our students to the realities of undertaking conservation activities in areas outside a national park. The combination of these aspects, as far as I am aware, makes the field school is unique among UK university field trips.

We now partner with the Malagasy organisation Sadabe and the University of Antananarivo’s (UoA) MSc in Anthropology and Primatology to run an annual field school based in unprotected, yet biologically rich, forests on Madagascar’s central plateau. Much of the biodiversity in this area is undocumented and threatened with extinction. It affords our students an exceptional insight into the complexities of field conservation work while developing their personal and professional networks.

The purposes of the field school are to:

- Provide training and field experience to a new generation of conservation scientists.
- Promote the importance of conserving the remaining forests of Madagascar’s central plateau.
- Promote collaboration, understanding and friendship between the partner organisations.
- Generate original data that will assist ongoing efforts to protect and restore forest ecosystems.

It is important that the students from the two universities integrate fully, therefore I start to co-teach the entire student cohort three months prior to the trip. Alongside online lectures, they are assigned to mixed groups and work with a member of UK or Malagasy staff to develop research questions and methodologies that they will carry out during the field school. The research questions are developed within a theme that the partnership has identified as being important for the conservation of the site. This year the research questions include the assessing the importance of riverine forests for wildlife and water quality, describing habitat use by the little-studied Madagascan nightjar and surveying local communities to assess the impact of invasive brown rats.

Once on site, each student group provides training to all of the other field school participants in their methodology and the entire cohort work together to collect data for each group. Data analysis are

carried out on site and, this year, we will be drawing all of the research together into a final report which will be presented back to Sadabe.

Whilst gathering ecological data is one of the primary focuses of the course, we were careful to ensure that the students from both universities engage in positive interactions with local communities. This includes helping to build new infrastructure, fundraising for resources for a new secondary school and holding an annual (and usually very one-sided) Madagascar vs UK football match.

“Without us here, you just make tiny steps. Without you here, we must take tiny steps. But when we hold hands and walk together, we make huge strides.”

Prof Haingoson Andriamialison, addressing UWE students, 2017

I am extremely proud that our inclusive approach to the field trip has been pivotal to Sadabe gaining local agreement, and raising £1.2 million, to create a new 24,000 hectare protected area in the location of our field course. We have provided an outstanding learning experience for our students which is also having a hugely significant real world impact.

Challenges and future work

Providing live briefs is a difficult balance. Tasks need to be simple enough that students can quickly master the techniques but still produce outputs which are useful to partner organisations. In some areas this is unfeasible simply due to the level of knowledge or skills that is required to undertake the task properly. However, we have identified a number of instances where similar assignments can be implemented each year, based on new or updated data sets.

The next stage in our approach is that we’re starting to work even more closely with partners on the concept of sponsored modules and assignments. My vision is to have key modules at every level which are developed, reviewed and part-delivered by partner organisations, using live data in assessments each year. We have commenced this process with Natural England and Bristol Water and aim to roll out the first sponsored modules in 2019.

References

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