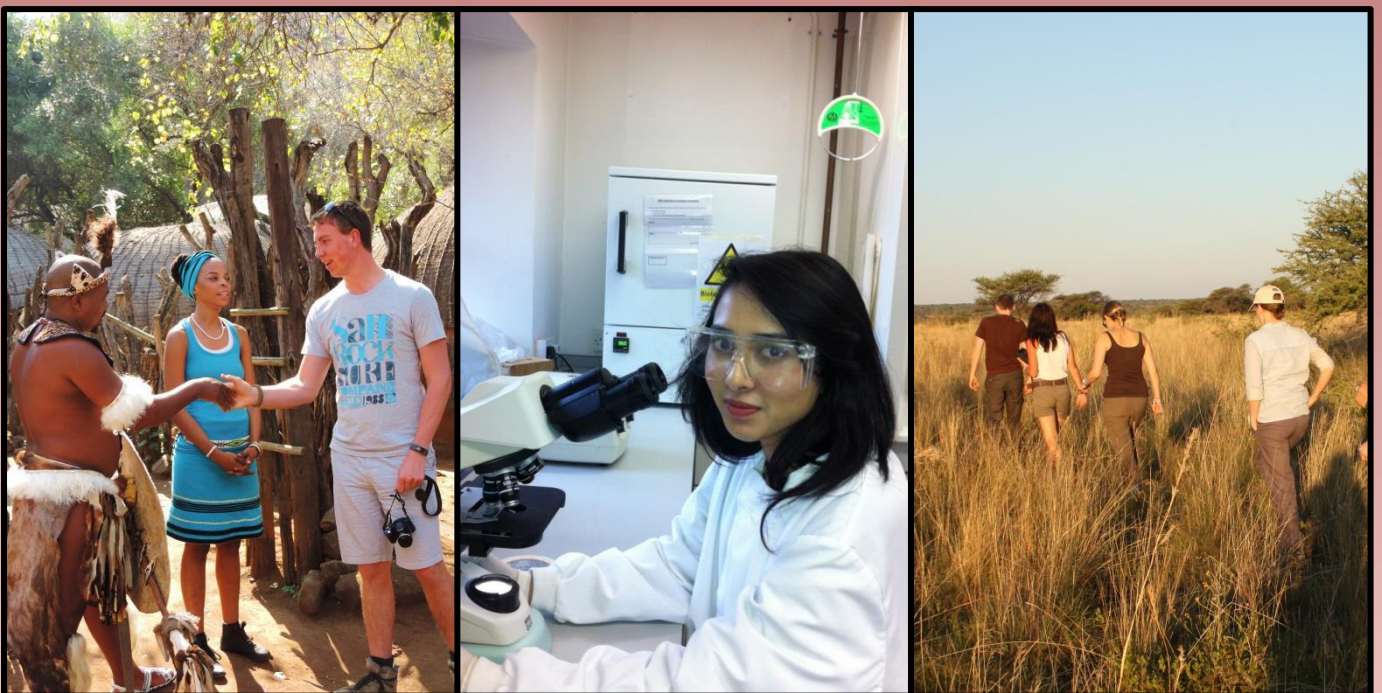


# FOR REAL: Forming Resilience and Employability through Authentic Learning

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### **Companion YouTube Channel**

Some students also discussed their dissertation projects in video form - the videos were made by peers within the same cohort facilitated by one of the postgraduate research associates. These can be seen on the FOR REAL YouTube channel at:

[https://www.youtube.com/channel/UCZPaCuOrUK99objF\\_weYOAnA](https://www.youtube.com/channel/UCZPaCuOrUK99objF_weYOAnA)



## FOREWORD

Higher Education is increasingly expected to produce graduates who proceed to worthwhile and satisfying careers and who can make valued contributions in a range of professional settings. Such aspirations are widely held by government, by employers and not least by the students themselves. A key question facing academics is therefore how to design and deliver teaching which will enable these aspirations to be met. This handbook provides some of the answers. It summarises the work of the “FOR-REAL” project, which has been funded by the UK’s Higher Education Academy (HEA) and undertaken by a group of academics at the University of Gloucestershire who between them have considerable expertise and experience in this field.

Such is the importance of the employability agenda that in recent years it has generated a considerable body of literature. However, there are a number of reasons why this “FOR REAL” handbook is of particular interest. The first is that, although it has wider applications, the focus is on two traditional academic disciplines, namely Geography and Biology (and their allied subjects). For disciplines like these, often thought of as somewhat remote from the world of work, the employability agenda can at first seem particularly challenging. (Indeed, readers unfamiliar with the skill-related benefits of a geographical or biological education, might be attracted by the thought that if employability initiatives can work in these traditional disciplines, they can work for me too!). A second feature of the “FOR REAL” project is that its work is underpinned by research which evaluates the initiatives described through a combination of questionnaires, interviews and student focus groups. Indeed, a full chapter is devoted to the methods of data collection, so enabling the reader to judge for themselves the credibility of the evidence base and to see in action the kinds of evaluation techniques they too might wish to use in undertaking their own pedagogic research. A third attractive feature is that this volume wears its scholarship lightly. The authors place their work within the context of the relevant literature but do so without too much jargon or detail. The text is therefore accessible for the beginner while adding fresh insights for those already active in the employability arena.

The handbook focuses on four employability initiatives, with a chapter devoted to each:

**Internships**, which at Gloucestershire can take various forms but all include students undertaking a project with an external partner organisation

**Dissertations**, where the student conducts a research investigation which is placement - based

**Real World Modules and Assessments** which are typically classroom-based but incorporate working on real or live problems or case-studies,

**Fieldwork**, where the focus is on using novel locations as arenas in which to develop students’ employability skills and attributes.

The authors have taken care to provide a consistent format so that each chapter has a scene-setting introduction, a brief literature review, a discussion of the Gloucestershire experience and research findings, and a final section highlighting recommendations for practice. Readers are alerted to both the benefits and the possible downsides of all four kinds of initiative. However, the overall message is one of students reporting that their learning has been enriched, their personal skills enhanced and their knowledge of the workplace improved.

Readers must, of course, be mindful that this modestly-sized handbook cannot be a comprehensive guide to employability. Moreover, those with a hard science background should be aware that, as is common in practitioner research, the evidence-base is qualitative rather than statistical. Nonetheless, there is much of interest here and many readers will certainly benefit from comparing their own experiences with those of the Gloucestershire team. In addition, some will feel encouraged and emboldened to engage more actively with the employability agenda in their own institutions and disciplines. This handbook is therefore a timely reminder of the benefits of employability initiatives which are tailored to local circumstances but also informed by the experiences of colleagues elsewhere.

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# Chapter 1: Introduction



## CHAPTER 1: INTRODUCTION

### REAL WORLD CHALLENGES AND AUTHENTIC LEARNING

One of the key roles of Higher Education is to prepare graduates to develop the skills they need for the workplace, but the ability of the sector to meet the 'gap' between graduate skills and employer expectations has been open to question (Hills et al., 2003; CBI, 2013). Student employability is therefore a prominent issue for Higher Education, but faces several challenges, including variation in resources allocated across the sector, the expectations of student and society and the extent to which students engage with employability initiatives (QAA, 2013). One of the ways in which university departments are increasingly seeking to meet these challenges is by moving from a largely lecture-based and campus-delivered curricula to a more varied delivery that allows students to engage with, and be challenged by, real world issues and experiences.

Encompassing real world learning in HE typically involves embedding activities within undergraduate programmes that take students out of their academic comfort zone to experience teaching and learning in the real world. This includes internship modules where students undertake projects for external organisations, working with partners to develop assignments with outputs that have genuine value outside of student assessment and innovative fieldwork in novel locations. Such initiatives attempt to enhance student experience, increase attainment and, notably, improve employability prospects. This is done through the way in which such initiatives teach or enhance learning of subject-specific and transferable skills (e.g. conceiving, developing and executing a project), as well as through increased student engagement with learning and networking with potential employers. Participation in such initiatives may also help students develop to become flexible and resilient graduates who are able to adapt positively to pressure and setbacks and are thus ready for a complex and uncertain world (Hughes, 2011). Increased ability to rise to post-university challenges would further enhance graduates' employability. Indeed, Gedye and Chalkley (2006, p.3) suggest that delivering employability within HE involves students gaining 'experience, skills, attributes and knowledge of value to employers', 'self-promotional and career-management skills' and 'a willingness to learn and reflect on learning'. This development will not only benefit the student, but also the wider community and economy (Scottish Funding Councils for Further and Higher Education, 2004).

The concept of real world teaching and learning is broad. Previous considerations of the role of real world teaching and learning activities in HE have described it as representing 'learning in the classroom that is modelled on activities that take place in the workplace' (Gedye and Chalkley, 2006, p.58), student development for effective citizenship (Barlow, Louw and Price, 2008), teaching that leads to enhanced employability (Vignali and Hobson, 2009), experiential learning (Rainey, 2011) and involving work for external agencies that take on the role of 'client' (Taylor, 2011). We have chosen to adopt the term 'authentic learning' to represent the spectrum of activity that can be encompassed by learning in a 'real world' setting. This implies that students not only benefit from enhanced employability, but

also gain an authentic understanding of the world in which they live through their discipline, with associated wider potential benefits for HEIs, employers, the community, the economy and sustainability. There are also potential benefits for the student's study of their academic discipline through being able to make links to the wider world and being able to place their discipline in context. Under this definition, authentic learning seeks to integrate the academy and the real world, so that they work effectively in partnership rather than being separate from each other.

## THE FOR REAL PROJECT

There has been little empirical research into whether, and under what circumstances, authentic learning actually benefits students. The 'For REAL' (Forming Resilience and Employability through Authentic Learning) project, funded by the Higher Education Academy, was developed to enhance this limited evidence base. This project draws together a multi-course, multi-cohort, evidence base in geography and allied disciplines to evaluate the real world benefits and challenges associated with authentic learning, and to make recommendations in relation to how authentic learning experiences can be optimised. This knowledge is vital given significant change in the HE landscape, including the new fees regime and ever-more competitive job markets.

## SCOPE AND FOCUS

This project sought to consider a range of real world initiatives for students on differing courses within the same HEI (University of Gloucestershire, UK). All students were studying in the same department and taking courses in geography and allied disciplines including ecology, biology, criminology, applied social sciences and community engagement and governance as well as two-subject combinations between these.

The focal authentic learning initiatives included:

- a) Internships (projects undertaken with external partners as 'clients')
- b) Placement-based dissertations
- c) Embedding real-world assignments in modules (linked to external agencies)
- d) Innovative fieldwork (working on novel, on-going research projects)

## OBJECTIVES

The project's objectives relevant to this handbook were as follows:

- 1) To evaluate the effectiveness of initiatives in relation to student experience, attainment and employability
- 2) To generate recommendations for making initiatives optimally effective for all concerned.

## THE HANDBOOK

This handbook seeks to discuss and make recommendations for practice in relation to making real world initiatives effective for student attainment, experience and employability. The handbook represents a key project output drawing on the student data collection that took place at the University of Gloucestershire using focus groups, interviews and questionnaires across three student cohorts between May 2014 and June 2015. (Further information about the project design can be found in Chapter 2: Methods).

The handbook structure is set out in Table 1. Chapters 3-6 seek to draw out specific issues for a variety of 'Real World' options that may be pursued by HEIs, such as internships, dissertations, 'real world' modules and assessment and fieldwork in novel locations. Each of these chapters contains an overview of relevant literature before outlining the key findings from the For REAL project's data collection and implications for practice. A summary of the findings and overarching recommendations for practice are given in the final chapter.

TABLE 1: HANDBOOK STRUCTURE

Chapter	Content
<b>Chapter 1: Introduction</b>	The rationale and structure of the For REAL project
<b>Chapter 2: Methods</b>	A detailed account of the project's data collection procedures
<b>Chapter 3: Internships</b>	Explores student perceptions of internships
<b>Chapter 4: Dissertations</b>	The perceived benefits and challenges for placement-based dissertations
<b>Chapter 5: Real world modules and assessments</b>	Considers a range of real world modules and assessments
<b>Chapter 6: Novel fieldwork</b>	Compares student experiences of fieldwork in a novel setting
<b>Chapter 7: Conclusion</b>	Summary of the project findings and recommendations for practice

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# Chapter 2: Methods



## CHAPTER 2: METHODS

### INTRODUCTION

Data collection took place for the following real world initiatives occurring at the University of Gloucestershire:

- Internships (Handbook Chapter 3)
- Dissertations (Handbook Chapter 4)
- Real world modules and assessments (Handbook Chapter 5)
- Fieldwork in novel locations (Handbook Chapter 6)

This chapter describes the methods of data collection adopted for each of these initiatives.

### METHODS

The collection of data from students was undertaken using a variety of methods, including focus groups, interviews and questionnaires. These methods were used as appropriate based on the type of data desired and were chosen in order to seek to maximise the quality and quantity of data. This section outlines the rationale and processes for each of the adopted methods.

One of the distinctive features of this project was the recruitment of two postgraduate student research assistants (co-authors MAE and WJH) to work as academic partners on the project. While initial data collection was carried out by the project manager (co-author HR), the postgraduate student research assistants were able to lead on the main phase of data collection and also made a significant contribution to project development, data analysis and write up activities. Together, these three people comprised the data collection team. They led most of the data collection and everything that involved direct student interaction to ensure that all staff taking part in data collection were not involved in marking or grading the academic work of student participants (see Ethics statement below for more details).

### FOCUS GROUPS

The primary research tool used by the For REAL project was the focus group. Focus groups are a type of group interview where several people meet together with a facilitator in order to discuss a set of questions or issues (Pole and Lampard, 2002). They allow detailed insight regarding attitudes to be gathered and show trends within a particular group while allowing varying opinions to present themselves through the interaction of its members (Morgan, 1997; Smithson, 2000). While the focus group facilitator will seek to provide some structure for the discussion, it is



the interaction between participants that is 'central to the generation of data' (Pole and Lampard, 2002). It was this interaction that the project sought to capture in order to get a sense of ways in which students' perceptions shared commonalities or were contrasting. However, while the group nature of focus groups has specific advantages, it also makes the data gathered vulnerable to particular forms of bias. The group dynamic can cause people to behave differently, for example, they might be intimidated or want to impress. Dominating voices in focus groups can cause dissenting opinions to go unheard, even if shared by several members of the group. This problem has been highlighted by Hopkins (2007), who found that larger focus groups tended towards the exclusion of the younger participants' opinions. The For REAL project's focus group facilitators sought to manage this issue to a certain extent by asking for any alternative opinions on a topic if they felt that a few individuals had dominated a question.

In this project, five focus groups were held with students who had completed internships (see Handbook Chapter 3) and four focus groups with students engaging with real world modules and/or assessment (see Handbook Chapter 5). For internships, an initial pilot focus group was held with a small number of final year students in order to test questions and draw out wider themes. Copies of the questions used can be found in Appendices A.1 and A.2. Subsequent focus groups were shorter and carried out with larger numbers of students. Groups of 6-10 participants allowed everyone to contribute over the course of an hour, and holding 3-5 groups on a topic avoided having one group with potentially unusual views from skewing the overall findings (Morgan, 1997; Stewart and Shamdasani, 2015). Table 2.1 provides further details of the number of participants and length for each focus group.

Focus group recruitment was carried out predominantly via lecturers who both taught the students and were involved with the project (co-authors AEG, KL, JGD and AGH). Students were either incentivized with the offer of lunch or focus groups were held directly after lectures to increase uptake rate. In the case of three focus groups (2, 3 and 4 – see Table 2.1) on internships they were held during a lecture where it was felt the questions asked would also help them to reflect on their previous assignment and the module as a whole. Each focus group was recorded with a dictaphone for subsequent analysis. The focus group schedule contained ten questions. Care was taken by the facilitator to ensure that topics flowed from one to another, but the conversation was also allowed to take its own direction as long as it remained relevant to the research.

Regular meetings took place within the data collection team to agree themes and procedures for writing up the results of data analysis. Once the data were obtained, recordings of focus groups were replayed by the research team and

summarized by theme. Particularly relevant or articulate quotes were selected to illustrate significant themes. This initial analysis would then be supplemented by an additional researcher from the project team who would listen to the recordings and edit/add to them as they felt appropriate. This interpretation was then compared with other focus groups carried out on the same topic with recurring themes identified. During analysis it was useful to locate tensions between beliefs as well as surveying attitudes, to distinguish between an individual opinion and 'collective voice', and to appreciate that focus groups can often result in normative socially acceptable views emerging even when differences of opinion are encouraged (Kitzinger, 1995). It was also important to be aware of the factors which distinguish focus groups and therefore analyse them as discussions occurring in a specific controlled setting (Smithson, 2000).

## INTERVIEWS

Arksey and Knight (1999) describe interviewing as 'a family of research approaches that have only one thing in common – conversation between people in which one person has the role of researcher' (p.2). Interviews may take many different forms such as focus groups or one-to-one interviews, and can have many different structures. Semi-structured interviews are situated on a continuum between structured interviews, with a rigid set of interview questions, and unstructured interviews, which are far less planned (Fielding, 1993). Semi-structured interviews can be seen as an attempt to utilise some of the advantages of both approaches, by maintaining a loose structure to the interview while also allowing the participant scope to discuss a topic in a way that makes most sense to them. They make use of an interview schedule in order to ensure that all key issues are covered, but digressions are allowed when the interviewer considers this to be useful for the research topic as a whole (Bryman, 2008). Like focus groups, semi-structured interviews generate qualitative data as a result of the use of open-ended questions and an emphasis upon the full response of participants.

In this project, one-to-one interviews were used for the collection of data on the topic of dissertations (see Handbook chapter 4). It was decided to make use of interviews rather than focus groups here because of the nature of the projects – each being individual and personal to each student participant – and because of difficulties with recruitment for meaningful focus group discussion. This meant that some interviews were time limited as they took place during lecture sessions. Recruitment took place via lecturers, as for focus groups (see above).

Five interviews were carried out with students for the dissertations data collection, and Table 2.1 provides further details. Four of the interviewees had taken a placement-based dissertation and one student had completed a 'traditional' dissertation where there was no formal collaboration with an external partner. The

latter interview provided a useful alternative perspective but the students views cannot be claimed as representing the general student experience of 'traditional' dissertations. Interviews as a method do not provide the advantages of a 'group dynamic' (see above), but do allow interviewees to address questions as fully as they wish and address the possibility of dominance by particular group members (Bryman, 2008). The interview schedule was developed from the focus group schedule, and a copy can be found in Appendix B. Data analysis procedures were similar to those for focus groups (see above).

## QUESTIONNAIRES

Due to the intensive and time-limited nature of fieldtrips it was decided that self-completion questionnaires would be used as the primary mode of data collection for the topic of novel fieldwork. This method had the advantage of being relatively quick and convenient to administer (Bryman, 2008) in a fieldwork setting. It also increased the sample size dramatically over what would have been possible using focus groups or interviews. Self-completion questionnaires can also help to address the possibility of interviewer variability or social desirability bias (Bryman, 2008).

The questionnaire was developed by drawing on a previous questionnaire administered during a biosciences fieldtrip (Goodenough et al., 2014) and the focus group and interview schedules developed through the For REAL project. It had a mixture of open and closed questions (Pole and Lampard, 2002) and was limited to a single page of A4 to minimise the risk of respondent fatigue (Bryman, 2008). The fieldtrips selected were two separate fieldtrips to South Africa (one for Biology; one for Geography) and a fieldtrip to Northern Ireland (Geography and Criminology). Chapter 6 (Novel Fieldtrip) provides more information about each fieldtrip and the findings from the questionnaire.

The questions sought to uncover the effect of a novel location on students' perceptions of their learning in relation to skills and discipline-specific concepts. Students were also asked questions about how useful the trip had been in their preparation for employment and whether trip attendance had influenced their career plans. A copy of the questions is provided in Appendix C. The questionnaires were administered by lecturing staff at the end of each fieldtrip, but were completed anonymously and the data analysed by the project team. This mode of administration maximised the return rate for each questionnaire, although not all questions were answered by every student. The questionnaire responses were inputted into MS Excel and mean scores calculated for Likert scale questions. Qualitative responses were transcribed and groups of common themes were identified for each question and fieldtrip. These were then compared to student responses from other fieldtrips.

Although self-completion questionnaires are limited in their ability to draw out why people have particular values or behaviours (May, 2001) and are reliant on respondents to interpret the questions (Bryman, 2008), they were a useful means of collecting data across the cohort for each fieldtrip, especially in light of the practical difficulties with accessing students on particular fieldtrips.

## VIDEOS

Some students also discussed their dissertation projects in video form - the videos were made by peers within the same cohort facilitated by one of the postgraduate research associates. These can be seen on the FOR REAL YouTube channel at <https://www.youtube.com/channel/UCZPaCuOrUK99objFweYOAnA>

## SUMMARY

In summary, the For REAL research made use of three main methods of data collection: focus groups, interviews and questionnaires, in order to collect data on four key real world initiatives: internships, dissertations, real world modules and assessments and novel fieldwork. This chapter provides an 'audit trail' (Arksey and Knight, 1999) of how each method was carried out and the data analysed. The results of this data collection and analysis are discussed in the subsequent chapters of this handbook. Each method has specific strengths and weaknesses but the use of multiple methods of data collection can be seen as one of the strengths of the research project.

**Table 2.1: Data collection for each real world learning initiative**

<b>Initiative</b>	<b>Data collection method</b>	<b>Session number</b>	<b>Number of participants</b>	<b>Length of session (minutes)</b>	<b>Level of study</b>	<b>Lead discipline</b>
<b>Internships</b>	Focus groups	1	3	130	6	Biology
		2	12	45	5	Geography
		3	10	42	5	Geography
		4	10	43	5	Geography
		5	2	52	6	Geography/Biology
<b>Dissertations</b>	Interviews	1	1	90	6	Biology
		2	1	17	6	Biology
		3	1	12	6	Geography
		4	1	10	6	Geography
		5	1	9	6	Geography
<b>Real world modules and assessment</b>	Focus groups	1	3	54	6	Community Engagement and Governance
		2	3	45	6	Applied Social Sciences
		3	12	45	5	Biology
		4	5	38	6	Biology
<b>Novel fieldwork</b>	Questionnaires	Fieldtrip 1	22	N/a	5	Biology
		Fieldtrip 2	24	N/a	5	Geography
		Fieldtrip 3	9	N/a	5	Geography and Criminology
<b>Totals</b>	9 focus groups; 5 interviews; 3 fieldtrip questionnaires		120 participants			

## ETHICS

This research was conducted in accordance with the BERA Ethical Guidelines for Educational Research and the University of Gloucestershire Research Ethics Handbook. All participants completed an informed consent form prior to taking part in the study (see Appendix D for an example) and all quotes used have been anonymised. The project team ensured that all staff taking part in data collection were not involved in marking or grading the academic work of student participants.

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# Chapter 3: Internships



## CHAPTER 3: INTERNSHIPS

### INTRODUCTION

An internship is an arrangement made between an individual and an employer where the individual carries out work or work experience on the employer's behalf without any formal contract of employment. They will often include a training aspect which may or may not be linked with formal educational programmes. Internships are often viewed as an early career opportunity to gain work experience at entry level in an organisation after university. However they also provide the opportunity for university students to work for 'real world' outside organisations for a specified length of time on a specified project. The internship may be paid or unpaid, and when arranged through a HEI will often involve the student gaining some academic credit towards their degree (Narayana, Olk and Fukami, 2010). The extent to which students are responsible for selecting and/or designing their own internship may vary. Institutions will commonly assign one or more members of staff to develop relationships with internship providers, outline the roles of provider and intern, match providers with interns, and monitor the student experience (Jackson and Jackson, 2009).

The University of Gloucestershire's optional second year internship module provides some formal advertised opportunities that students may apply for but also gives the opportunity for students to find their own project, with institutional support and oversight, in a more 'semidirected' approach (Jackson and Jackson, 2009). The For REAL project collected data on the student experience of this module and conducted four focus groups with students who had completed, or were currently taking, it.

University of Gloucestershire students can also take internships as part of a wider Degreeplus programme that offers students opportunities in relation to work experience, skills development and career management. Degreeplus internships are extra-curricular and open to all University of Gloucestershire students. Students will spend 80 hours working on a project with a local organisation or with a team within the university. They are able to access support from dedicated Degreeplus advisors who are based on each university campus. A further focus group was held with students who had completed a Degreeplus internship.

Further details of the methodology adopted can be found in the handbook's Methodology chapter. Prior to the findings from these focus groups being discussed, the literature on university internships will be reviewed.

### REVIEW OF INTERNSHIPS LITERATURE

The putative benefits of student internships include: helping students to confirm their interest in a particular discipline; learning what skills they need to develop when they return to study at the university; gaining 'real world' experience that will be valued by future



employers; the development of contacts that can help them to gain employment in the future (including valuable references); and helping students to confirm or reject what career path they would like to move into (Jackson and Jackson, 2009). There are potential benefits for students' personal, civic, and professional development and their understanding of their discipline. Furthermore, their work may have a positive impact on the community (Simons et al, 2012). Through internships students may also develop more realistic expectations about their work and work life, including the importance of communication, teamwork, networking and developing relationships in the workplace (Barnett, 2012). Completing an internship can have beneficial effects on future learning in relation to students' knowledge, skills and grades (Farazmand and Green, 2011).

Internships also present challenges for the student and HE provider. Students will need to negotiate a new organisational culture which typically provides them with much more autonomy and much less structure than a university setting (Barnett, 2012). For institutions, potential challenges include the amount of university staff time involved in finding suitable projects and advising students and ensuring that students have a meaningful learning experience (Jackson and Jackson, 2009).

Much of the literature relates to internships in the United States and focuses on business and management. A key issue, therefore, is the extent to which findings based on specific customs and practice may transfer to other countries and disciplines. Even in the US there have been relatively few studies which provide formal testing of hypotheses (Narayanan et al., 2010). Narayanan et al. (2010) suggest that any theoretical model of internships must consider the roles of the key actors (student, university and company) simultaneously and how their needs and expectations can be managed when each party will have different goals and may be operating in different organisational cultures. The authors conceptualise the internship as a dual process of learning and knowledge transfer from the university to the company, and from the company to the university. They point out that while universities can seek to enhance their preparedness, the success of any internship project depends in part on the employer, and suggest that universities encourage organisations to provide periodic feedback to students as one means of improving student satisfaction. Interestingly, this study found that almost all faculty members interviewed pursued separate research agendas to their involvement in supervising internships i.e. that these duties were seen as teaching rather than as having the potential to form part of their research activities.

Internships are the most common 'real world' or experiential learning tool used in Geography (Jackson and Jackson, 2009). Jackson and Jackson (2009) conducted a survey of US Geography students of the perceived effectiveness of a 'semidirected' internship programme over a five year period. They established that students had found the programme to be effective and beneficial, with 94% of students rating their experience as 'Good' or 'Excellent'. Suggested improvements included better communication between universities and internship providers on the importance of providing meaningful work tasks, more explanation by university mentors/supervisors about the purpose of assessment projects, and more concrete feedback (including suggestions for improvement) on completed assessment projects.

Cord and Clements (2010) investigated the 'soft skills' (communication, interpersonal and emotions/values) developed by students undertaking a Commerce Internship Program through the use of semi-structured interviews and analysis of students' reflective journals. They found that students identified improvements across a learning spectrum: from self-assurance (ownership of a belief or skill), to self-improvement (acknowledgement of their development of a belief or skill) and self-awareness (recognition of the need to improve a belief or skill). However 'the degree to which individuals embraced and connected with these skills was largely dependent on their personal level of engagement' (Cord and Clements, 2010, p. 304). Barnett (2012) found that business students who had completed an internship focused on the importance of developing 'soft skills' (communication skills) rather than technical skills in their advice to future internship students.

High student input into the internship appears to have a positive impact on student satisfaction (Narayanan et al., 2010). Lu et al. (2011) examined the role played by retail industry interns in shaping their own internship experiences. Interns' emotional expression and social (or networking) activities were found to be significantly related to their perceived experiences of learning and mentoring and their internship outcomes (job satisfaction, commitment to the organisation, positive attitude towards working in the industry). Their findings suggest that attention should be paid to the ability of interns to share their emotions with others at work, and how interns' opportunities to interact and build relationships with other workers at the organisation should be encouraged. Derounian (2011) researched the role of staff-student relationships in undergraduate dissertation preparation and found, similarly, that students' ability to share their emotions can be an important factor.

In summary, the literature suggests that internships have the potential to provide benefits to students in relation to the development of both discipline-specific and 'soft' skills (communication, relationship, emotion) which may contribute to their workplace readiness and success. In managing an internships programme universities should consider the expectations and relationships between all three parties involved: the student, employer and HEI. There may also be specific issues in relation to ensuring that assessment tasks and student feedback are meaningful. However much of the literature is focused on the US, and there clearly needs to be more research on the UK context and for the Geography and Biology disciplines. It is hoped that the findings from this project will contribute towards addressing this gap in the evidence base.

## **FINDINGS**

As described in the methodology, five focus groups were held with students on the subject of internships. Three focus groups were held with Level 5 (second year undergraduate) Geography students who had either chosen or not chosen the internship module, and one focus group was held with a group of Level 6 (final year undergraduate) Biology students. A final focus group was held with a Level 5 Geography student and a Level 6 Biology student who had both completed a *Degreeplus* internship.

## BENEFITS AND CHALLENGES

All the students who had completed or were taking the internship module talked very positively about their experiences of it. Some students argued that the module provided the opportunity to do a project they had a personal interest in or alternatively to get credit for work they were doing anyway. Identified benefits of doing an internship for employability included being able to incorporate the experience in a CV, learning how to manage time and developing effective working relationships with others. Students also talked about how the module had helped them to narrow down or confirm their post-graduation options. The Level 6 Biology students discussed how the new fees regime had meant a lot of students in their year had chosen not to do a gap year, so the internship module provided a valuable alternative opportunity to test out what they would like to do after university, including the kind of work environment that would suit (or not suit) them.

*I like mine in the fact that I wasn't sure what career path I wanted to go into, so I wanted to see what it was like and I'm really enjoying it now so I've tailored my modules to that career path.*

(L5 Geography Student)

*And also it just looks good on your CV to have some sort of practice of what you're doing, as well that you're not just getting taught something you are actually going out and doing something.*

(L5 Geography Student)

*I think for someone who didn't know what they wanted to do, I think it's a trial and error thing to confirm what they don't what to do.*

(L6 Biology Student)

Students discussing the benefits of the Degreeplus internship described how it was valued by employers (with one stating that it makes you 'stand out against other people'), allowed them to gain experience of the jobs market in their area and also provided experience of networking. One student who had chosen a Degreeplus internship described a positive experience overall but found that some aspects of the internship were not as relevant to their career plans as others.

*I went to the [name of organisation] and sort of helped on their project it's like a community project trying to get people from the community to go to this country park and um, 'cause I'm indecisive I didn't really know what I wanted to get out of the internship...I did some questionnaires and stuff which was pretty good but then I helped out with some kids events and I'm not really interested in teaching so it wasn't really that beneficial... but overall I think it was a pretty good experience.*

(Level 5 Geography student)

The Level 6 Biology students argued that the internship module provided a unique experience and opportunity to develop their skills. One of these students thought that the experience was so valuable that the module should be compulsory. The Degreeplus interns also discussed the skills they had developed in their internships, including experimental design.

*The point is that it is different, you are getting a broader skillset by doing that, you're not doing another exam. I'm sure it does feed back into the modules you did after, but it stands alone in doing skills that would be absent if you hadn't done the module...You feel more sense of achievement finishing that module than others.*

(L6 Biology Student)

Students also discussed the benefits of taking the initiative in making the most of additional opportunities that arose while studying for their degree.

*That's a big part of what I learnt here, doing extra things, you learn writing and stuff like that learning about how to get involved in projects and actually doing things.*

(L6 Biology student)

*It's what you make it, it is about the course but it's about what you get from it like transferable skills, doing extra stuff like working in the local area, also going out and volunteering, things like that.*

(L5 Geography student)

*At the end of the day you've got nothing particularly to lose, you're at university, it's the only time when you're probably gonna get a load of opportunities and the time to do it, so just go for it, if you're not sure there are the [Degreeplus] advisors.*

(Level 6 Biology student – Degreeplus internship)

Students thought that the main challenge of the internship module was finding an internship, including approaching organisations and designing a suitable project and the time involved in doing this. The L5 students also discussed the challenges of juggling the workload with their other study and work commitments and some of these students suggested that they would have liked more information about this. In contrast, other L5 and most L6 students said that the assessment timings involved in the internship module meant that they were able to space their work out more evenly.

*I think it's good that you can tailor almost around your workload, ... when you don't have that much other assignments going on, because its set over such a long period of time, you can ... it's very much tailored with how much you can do it.*

(L5 Geography student)

L5 and L6 students also talked about how the internship module was perceived as more 'risky' in relation to assessment, both in terms of knowing what was required and the relatively small number of assessment points. There was also a perception that doing a module of this kind which was less familiar could result in a lower grade.

*With the internship it's helped me realise that you are thrown in the deep end and if you mess up it's on you and it's quite daunting really.*

(L5 Geography student)

*One piece of work decided your module grade so it better work or that's it.*

(L6 Biology student)

### CHOOSING TO DO AN INTERNSHIP

The benefits and challenges identified above were often also provided as reasons for taking or not taking the internship module. Students particularly emphasised the applied experience that an internship gave them.

*I wanted hands on experience and ... it seemed to suit me better than the other options that were available.*

(L5 Geography Student)

*I chose because geography is quite a broad subject so it's quite good to get some more specific experience of like the job.*

(L5 Geography Student)

The students in the L6 Biology focus group thought that having an interest was a necessary starting point to doing an internship.

*People need to know what they are like, what they are interested in, and talk to them [lecturers] about it.*

(L6 Biology Student)

*80-90% of people on your course are doing it to get a job that they like doing...They are passionate about something and the internship helps you to find out, test it out, a lot of people have an idea in their head.*

(L6 Biology Student)

However there was an acknowledgement in focus groups across both years that not all students might have an interest or idea of what they could do in an internship, and that this might be a factor in deciding not to do the module.

One Degreeplus internship student emphasised the importance of being motivated in order to do the (extra-curricular) Degreeplus internship.

*Me personally no, but I can see where there would be the hurdles, I mean just the nature of it you have to be motivated to go out and do it yourself and then continue on.*

(Level 6 Biology student – Degreeplus internship)

Level 6 students' main advice to students considering whether or not to do an internship was to speak to the lecturers about their ideas for a project and to develop practical plans/research questions through this dialogue. One student in the Level 6 internship module focus group said that they felt less confident than the other students about contacting the lecturers directly in this way, although this student also described how doing the internship had given them more confidence in communicating with and working with others.

The Level 5 focus groups included students who had both done and not done the internship module. This provided the opportunity for students to explore together the reasons why someone might choose not to take up this opportunity. The main reason students gave for not choosing an internship was that other modules were perceived as more interesting or useful. Some students who had not chosen an internship suggested that they would be able to do work or voluntary experience in their own time that could be just as beneficial as an internship and would give them the opportunity to gain more subject knowledge from the alternative module taken.

*It almost feels like there needs to be more of a push in the fact, like someone said it not looking like an academic subject but it very much is because that is the real world experience you are getting. You are still having to write-up a report within it. It almost needs to be pushed that it isn't just an 'add-on', it is a really good thing to have.*

(Level 5 Geography Student)

*I'd say that on the other modules that were available, they sounded more interesting than that, and you can always pick up an internship with, say Degreeplus or on your own or work experience in the holidays. So whether it's that vital to do it as integrated with your studies is something that I thought about and I thought well if I can do it in my own time whilst keeping interest in my modules here then that would be more beneficial to me.*

(Level 5 Geography Student)

*I think the reason I didn't choose internship was because I quite liked the [other available] modules and I thought it's something you can arrange in the holidays outside [university semester].*

(Level 5 Geography Student)

Students in one internship focus group responded to this final point by arguing that by doing an internship through the university this meant that they were able to access a lot of support with arranging it. The Degreeplus internships students also emphasised the value of the support they were able to access from the Degreeplus advisors.

The challenge of organising your own placement made the module seem intimidating to some students, while others were concerned about the potential impact on their grades.

*To me it sounded like something else that was going to take extra organising when you're in your first year and you've got loads to do.*

(Level 5 Geography Student)

*I think I was a bit scared about doing the internship module because now employers can see all of our module results, it felt like I had to stick to the academic route. But now it makes more sense that internships actually have more real world ... it more applies more.*

(Level 5 Geography Student)

*[It was] really hard to predict a mark after doing it, some things you have an idea, internship, really hard to predict, that was, you weren't quite sure of how good it was.*

(Level 6 Biology Student)

Some students who chose not to do the internship module said that they now regretted not doing so after hearing positive reviews from other students. Students from one Level 5 focus group in particular suggested that they would have been more likely to do the module if they had had more information about it, including the workload involved and how this impacted on other study/work commitments.

*I found there was not a lot of information on it and ... I just wasn't certain what kind of place I would get out of it. I now wish I would have picked it.*

(Level 5 Geography Student)

*...and also pointing out that it can be stretched over a longer time period because I thought ... I was concerned that I won't have time to do that and do all of my other assignments, and I work part-time as well.*

(Level 5 Geography Student)

One student from the Level 6 focus group thought that some students in their year may have been put off from taking the internship module as it ran for the first time for their year group, because they wanted to avoid being 'guinea pigs'.

Students were asked their opinions of the optimal timing of the internship module. The Level 5 focus groups showed no clear consensus on this issue with suggestions that the module be placed in each of the three university years and well as providing it as an option for students to complete over the summer (one student suggested that it be provided as an

additional option to course modules). One Level 5 student thought that the second year timing was the most effective as it meant that you could choose modules to suit your interest at Level 6. The Level 6 Biology students agreed that the second year timing of the module was the most appropriate.

### LINKS TO ORGANISATIONS

Students found or developed their internship project in a variety of (often interlinked) ways: a previous interest, voluntary or paid work, links to other research projects or to contacts in other organisations. Two Level 6 internship module students discussed the importance of going to an organisation that 'cared about you' and would ensure that you were well supported, but also acknowledged that lecturers would also be able to provide support if there were problems with the organisation. Another argued that it was more difficult to get help from outside organisations for a non-dissertation project as they were less likely to understand what was involved.

Both Level 5 and Level 6 internship module students talked about the importance of networking and making contacts in the organisation they were working with. For one Level 6 Biology student this was linked to being able to develop effective working relationships within the organisation.

*It's about who you know and what you know.*

(Level 5 Geography Student)

*A lot of it is quite social as well. A lot of the things to do with science is quite social. You need to keep all the people you work with happy and liking you. You have to learn, and have good relationships with people and get in favours rather than just plugging along on your own.*

(Level 6 Biology Student)

When asked about whether there were any disadvantages to doing a Degreeplus internship, students identified some minor issues around expectations and communication. For example, one student had not realised that they would be reimbursed for travel, while the other had found that their organisation seemed unhappy that they would not be available to work over the summer.

### SUMMARY OF FINDINGS

In summary, students taking part in this research generally found that taking the internship module aided them in clarifying their interests. Several students argued that more explanation of the module and the flexibility and opportunities it afforded would have encouraged them to take it as a study option. The internship itself can be challenging to set up, particularly in relation to making contact with external organisations. The module was seen as creating an additional challenge, which for some students was intimidating, while for



others it heightened their sense of achievement and growth upon completing it. The *Degreeplus* internship students emphasised the employability-related benefits of choosing this extra-curricular internship. They also discussed the importance of student motivation and of ensuring clear communication with partner organisations.

### IMPLICATIONS FOR PRACTICE

The role of university staff in supporting and advocating the possibilities of internships is important. Some students felt there was not enough information given on the internship module, which may have prevented some students from choosing it. There was also a perception that other modules would give more in-depth subject knowledge or a higher grade.

- It may be beneficial if time was allocated for lecturers to discuss internships in detail (including support arrangements and timescale) and seek to draw out and dispel any myths or assumptions. This might involve exploring the role of grades in relation learning and other positive outcomes from university such as employability.

Students emphasised the importance of having an interest and being motivated to help them to choose and plan for an internship.

- Sufficient time should be given to students to allow them the opportunity to formulate internship ideas/interests and to make initial contacts. Including some formality into this process may encourage uptake of internship opportunities, for example a reflective learning session. This could be focused on interests and/or career aspirations and how an internship might help them to develop these.

The optional nature of internships at the University of Gloucestershire means that some students will not choose an internship.

- It is for individual institutions to decide whether or not an internship has the potential to be beneficial for every student, or whether including internships as a compulsory option could lead to a lack of motivation and a poor outcome for some students.

Retrospectively, some students who did not do the internship module showed signs of regret after hearing the positives from their cohort.

- It seems likely that it would be beneficial for internship uptake to bring in a student/s who has previously completed an internship to discuss their experiences when publicising internship options.

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# Chapter 4: Dissertations



## CHAPTER 4: DISSERTATIONS

### INTRODUCTION

The dissertation is an integral part of many undergraduate degree programmes taken in the final year and forms a significant unit of independent study that differentiates the honours from the ordinary degree (Webster et al., 2000; Todd et al., 2004; QAA, 2008). It challenges students to demonstrate development of key skills and helps them synthesise a range of discipline-based knowledge through critical engagement with data in their area of research (QAA, 2008). In the undergraduate curriculum the dissertation varies in length from 5,000-12,000 words and can be the first major piece of research-driven assessment that students face, frequently seen by academics, students and potential employers as the defining element of an undergraduate degree (l'Anson and Smith, 2004).

The University of Gloucestershire provides the opportunity for final year undergraduates to choose between taking a placement-based dissertation and a more 'traditional' dissertation. A placement-based dissertation will involve the student working with and for an external partner to develop a dissertation project, while a 'traditional' dissertation does not have these links and so the student will be working more independently on a piece of research. However both types of dissertation will involve the collection of data and the development of a student's own idea. Both types are also included within the same overall module and share the same assessment structure, word length and timing for each discipline.

In order to gain an understanding of the decisions and experiences of students choosing these options the For REAL project conducted five interviews with students who had either chosen a placement-based dissertation or a 'traditional' dissertation. Further details of the methodology adopted can be found in the handbook's Methodology chapter. Prior to the interview data being considered, the literature on dissertations will be discussed.

### REVIEW OF DISSERTATION LITERATURE

Four objectives for undergraduate dissertation have been identified previously (Hussey and Hussey, 1997):

1. Development of analytical problem solving skills
2. Active learning by identifying and resolving problems
3. Application of academic knowledge
4. Developing skills for independent research.

Dissertation projects offer several benefits that help to enrich the degree experience and prepare students for life after university. First, they allow students to have more control over the direction of their work than other modules and give them an opportunity to choose a research area that is of personal interest and value (Clark et al., 1998). This factor

can provide continuing motivation throughout the process and may link to their future career aspirations (Saunders et al., 2000). They also facilitate the transition from 'independent knowing' to 'contextual knowing' which helps to integrate personal knowledge within the disciplinary knowledge community (Baxter Magolda, 1992). This transition fosters not only generic attributes such as perseverance, project management and timekeeping, but disciplinary skills connected to the scientific research method (Stefani et al., 1997; Malcom, 2012). However, although dissertations require independent inquiry and exercise of judgment they can be distinguished from postgraduate degrees as analytical rigour is not demanded to the same extent (Clews, 1996). Finally they promote the ability of students to operate as autonomous learners thereby becoming more independent (Snively and Wright, 2003). These values may serve to reduce any negative impacts the dissertation process may have on certain students, and questions about the importance of the undergraduate dissertation itself (Lafferty, 2007; Greenbank et al., 2008).

Students can find dissertations overwhelming, and look for reliable guidance which will detail what is expected of them, what assessors look for and what makes a dissertation stand out (Webster et al., 2000). In this regard Derounian (2011, citing Shadforth and Harvey, 2004: 149-50) notes that student-supervisor dissertation "relationships can mitigate or exacerbate what is universally considered an 'emotional roller-coaster'". The first decision students must make regarding dissertations is the choice of a research topic, which has a bearing on all the other stages of the project, and therefore is one of the most important stages of the research process (l'Anson and Smith, 2004). Proposals can come directly from the student, or if they are unsure of a topic through the suggestions of lecturers and supervisors.

In addition to choosing a research area, there are opportunities within certain disciplines to pursue a placement-based dissertation working with an external organisation or to take a more traditional research approach. Consistent academic benefit from placement experience in undergraduate students has been shown (Reddy and Moores, 2012), and there are expected benefits for placement style dissertations such as greater preparation and confidence in starting a career in the 'real-world'. However, little research exists on the undergraduate dissertation itself (Greenbank et al., 2008), let alone explorations into the specific impacts of doing a placement-based dissertation or the respective values of a placement as opposed to traditional dissertation projects.

In exploring the experiences and thoughts of students who have undertaken both placement and traditional type dissertation projects it is hoped that the For REAL research can contribute towards a greater understanding of the benefits and challenges of placement-based dissertations.

## FINDINGS

As described in the methodology (Handbook Chapter 2), four interviews were held with final year students who had chosen to complete a placement-based dissertation (three

Biology students; one Geography student) and one interview was held with a final year Biology student who had done a 'traditional' dissertation. Students developed their dissertation projects from a variety of sources, including consultation with lecturers, an opportunity on residential fieldtrips and through links to an organisation they already volunteered with.

Some students also discussed their projects in video form - the videos were made by peers within the same cohort facilitated by one of the postgraduate research associates. These can be seen on the FOR REAL YouTube channel at <https://www.youtube.com/channel/UCZPaCuOrUK99objFweYOAnA>

### BENEFITS AND CHALLENGES

Students were asked about the benefits of doing a placement based dissertation. The most common theme that emerged from the data related to employability and opportunities for networking.

*I would say doing a dissertation in conjunction with a different organisation is good because ... it's more realistic to the world of work...therefore it is a good thing, you've gone from student to dissertation with external partner, that's semi-professional environment, and then you may get the job... it gives you that experience with working with someone that's not just yourself.*

(Level 6 Geography student- placement-based dissertation)

*The opportunities is definitely all the networking and it has also inspired me as I would like to do volunteering with the ... group that I went to see [as part of data collection].*

(Level 6 Biology student – placement-based dissertation)

*The benefit to [placement provider] and also if you go to an interview like I went for an interview at [different organisation], and I definitely think the fact that I had something to do with ring-tailed lemurs in captivity it helps, like they probably thought 'look at that' and thought 'ooh, that's quite interesting, yeah'.*

(Level 6 Biology student – placement-based dissertation)

Students also described how placement-based dissertations could help to inspire their interest in a topic and how there were potential social benefits to working with an outside organisation.

*It's just it's kind of really inspirational, more and you're kind of really enthused when you're writing it 'cause you've got the memories of being out there rather than just a traditional one I suppose.*

(Level 6 Biology student – placement-based dissertation)

*I think if you're doing a normal dissertation there is no social element to it, and it's quite self-contained, with not a lot of communication with other bodies.*

(Level 6 Biology student – placement-based dissertation)

Three placement-based dissertation students mentioned issues related to organisation and time management. Two of these students felt that a placement-based dissertation has helped them to be better organised while another had struggled with organisational issues and meeting deadlines.

*[You] learn how to prioritise things a bit more.*

(Level 6 Biology student – placement-based dissertation)

*Mainly time management probably, it's really helped because you have to fit it in, going to [placement provider] around all your other work and then obviously the write up of it.*

(Level 6 Biology student- placement-based dissertation)

*When you've got this partner that wants deadlines spread evenly across I think I struggled meeting those.*

(Level 6 Geography student – placement-based dissertation)

Students also described the skills they had developed while doing their dissertations, although these could flow from both placement-based and 'traditional' dissertations. Some students indicated that they appreciated the transferability of these skills in the workplace.

*It's definitely increased my potential to research, like, far more research has gone into this dissertation and I have done so much more reading and understanding on this dissertation than I have on other essay based modules. It's definitely increased my skillset on literature analysis and how things can contribute to your outcome, your project.*

(Level 6 Geography student - placement-based dissertation)

*I have a feeling that being able to conduct a couple of lab procedures you then easily have the potential to learn how to conduct different lab procedures. You might not know what they are instantaneously, but you could fall into a role where you can easily pick up a precise order of things.*

(Level 6 Geography student - placement-based dissertation)

*It [a dissertation] is definitely worth doing, it is a completely different thing to any other modules that you do at uni so it gives you a completely different skillset.*

(Level 6 Biology student – placement-based dissertation)

Students also commonly described how completing a dissertation had increased their confidence but this was not restricted to placement-based dissertations.

*It's increased my confidence in being able to pursue something that I was initially not aware of.*

(Level 6 Geography student - placement-based dissertation)

*I think it has improved my confidence quite a lot because I was quite shy, doing quite a few questionnaires and doing interviews has really boosted my confidence.*

(Level 6 Biology student - placement-based dissertation)

*It has definitely made me feel more confident, I know more what it entails and what it involves in a day to day basis.*

(Level 6 Biology student – placement-based dissertation)

*A lot of the time, I guess in jobs, they say 'we would like you to do this and go off and do it' and before this that would freak me out but now I have more confidence in my ability.*

(Level 6 Biology student - 'traditional' dissertation)

For some students their dissertation had also helped them to confirm their work-related interests.

*It's taught me that I would like to work more hands-on in the field than I would in the lab.*

(Level 6 Biology student - 'traditional' dissertation)

*I kind of wanted to go into a more zoo area before my dissertation but now know conservation projects is now where I want to work.*

(Level 6 Biology student – placement-based dissertation)

## WORKING WITH OUTSIDE ORGANISATIONS

Placement-based dissertations generally involve working with outside (public, voluntary or private sector) organisations and this can present distinct opportunities and difficulties. For one student (L6 Biology), working with an outside organisation was beneficial as they received support and feedback on their work and making sure that the data they were collecting was relevant for the organisation. Another student (L6 Biology) felt that it was a



challenge to present the views of a range of stakeholders (e.g. the local council, volunteers) equally. Two L6 Biology students described how they felt that working with an outside organisation had created additional work compared to a 'traditional' dissertation, while a L6 Geography student argued that working for an outside organisation meant that you worked harder on your dissertation.

*It did feel like there was a lot more work than what everyone else had done.*

(Level 6 Biology student- placement-based dissertation)

*[Knowing] someone [an organisation] is relying on you makes you work harder.*

(Level 6 Geography student- placement-based dissertation)

## SUMMARY

In summary, students highlighted the employability-related benefits of completing a placement-based dissertation. For some students, placement-based dissertation research was beneficial for their organisational and time management skills, while for another this was an additional challenge. Students also stated that doing a dissertation could help with skills development, increase their confidence, and confirm work-related interests, although this appeared to be applicable for both placement-based and 'traditional' dissertations. Three students discussed their perception that a placement-based dissertation involved more work compared to a 'traditional' dissertation.

## IMPLICATIONS FOR PRACTICE

The opportunity to work with external organisations was seen to increase the value of the dissertation module by the students interviewed. This can provide students with exciting experiences which make writing up the dissertation more pleasurable and potentially increase their passion for their subject. Students mentioned feeling more prepared for work in the 'real world' having faced the sort of challenges that might come up when starting their career such as feeling better prepared for interviews. They also appreciated the opportunity to develop organisation and time management skills.

- Institutions should therefore highlight these potential benefits when providing students with information about their options in relation to placement-based and 'traditional' dissertations.
- It may also be beneficial for students completing a placement-based dissertation to consider how they might utilise the employability/networking opportunities that this affords.

Working with outside organisations can generate both benefits and challenges for students in relation to the possibility of additional support and the perception that more work is involved when compared to a 'traditional' dissertation.

- HEIs and students should therefore consider the capacity of each potential placement organisation and staff to provide effective student support and the implications for student/staff workload of working with an outside organisation.

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# Chapter 5: Real world modules and assessments



## CHAPTER 5: REAL WORLD MODULES AND ASSESSMENTS

### INTRODUCTION

The For REAL project focuses on a range of real world learning initiatives which provide authentic learning experiences for students. This chapter focuses specifically on modules which incorporate a ‘real world’ element in their design or assessment practices. Focus groups were held with students from four University of Gloucestershire modules which met these criteria (Table 5.1). Relevant literature on real world learning in HE will be considered before the findings from these focus groups are discussed. The chapter concludes with a set of recommendations for practice in relation to real world modules and assessments.

**TABLE 5.1: FOCAL REAL WORLD MODULES**

Module	Course(s)	Details
Ecological Impact Assessment and Monitoring (Level 5)	Biology /Ecology	Module centres around students undertaking ecological surveying and a formal Ecological Impact Assessment of an actual site earmarked for development, seeing the development plans and (usually) meeting the developers too. They undertake all the industry-standard surveying using nationally-accepted protocols and write up a consultancy report as their assessment.
Conservation Ecology (Level 6)	Biology/ Ecology/ Geography	Students on this module experience a range of lectures, field trips, seminars and workshops. For their main assessment, they have a choice of a real-world assessment or a more ‘traditional’ (essay-based) assessment. The real-world option involves students create a Local Biodiversity Action Plan (LBAP) for University campus(es) for a specific species or habitat of their own choice. This is done by linking with the University Estates Team, who take the role of client. The alternative assessment is to critique in essay-form a conservation scheme of the student’s own choice from anywhere in the world in terms of its effectiveness.
Community Projects (Level 5) AND Applied Research Project (Level 6)	Community Engagement and Governance and Applied Social Sciences	These modules considers how the needs, problems and opportunities of a community can be identified, and examines resource management as part of the development process. Students research, analyse and assess community needs, problems and opportunities – linked to a town, neighbourhood or village in which they (likely) work. They go on to analyse and evaluate the skills, knowledge and other resources required to address the issues identified. In assignments, students are required to justify suggestions for resource use; and practise technical and professional skills linked to the individual’s job, home or workplace. Many of these assignments lead to projects ‘on the ground’, such as the creation of a play or Skatepark. Students therefore ‘kill two birds with one stone’: gaining academic credit whilst bringing about constructive change in a community.

## LITERATURE REVIEW

Identified literature on real world learning in Higher Education is largely US-based, but has clear applicability to UK HE teaching and learning practice. The exact meaning of real world learning differs between authors. Some define this as the application of knowledge learned in the classroom to real world settings (e.g. Campana and Peterson, 2013; Grau and Wilson, 2015), while others describe the relating of knowledge to action (Brundiens et al., 2010). The key point, though, as noted by Evans Commander et al. (2012) and Vijayaratnam (2012) is the linking of theory to practice in relation to real world learning opportunities. Real world learning has also been linked to problem solving approaches where the identified 'problem' is a real or simulated problem that is located outside of the classroom (e.g. Steiner and Laws, 2006; Brundiens et al., 2010; Vijayaratnam, 2012). Coming up with workable solutions to such challenges allows students to 'understand how they can have a positive impact on the world' (Brundiens et al., 2010, p.312).

Real-world learning may take place within the classroom and/or in collaboration with institutional or community partners (Steiner and Laws, 2006; Brundiens et al., 2010). Possibilities for classroom-based real-world learning opportunities include simulating a workplace environment within a course (Campana and Peterson, 2010; Grau and Wilson, 2015) or the use of simulations in assessment (Forman, 2012; Vijayaratnam, 2012). Brundiens et al. (2010) suggest that real world learning opportunities in Higher Education should incorporate three principles in order to be effective. Firstly, collaborative design, where all partners agree on its components, and there is time for team-building to ensure that roles, responsibilities, outcomes and expectations are clarified; secondly, coordination between the different real-world learning opportunities which students are offered during their course; and finally integration into general introductory courses to introduce students to 'the concepts and practices of real-world learning' (Brundiens et al., 2010, p.320). Overall, '[t]he design and implementation of the learning opportunity largely determine whether the opportunity provides a real learning experience'.

Successful use of real world learning ensures that students think critically about issues of accountability: 'Real world situations force students to identify who is and who should be held accountable, to explore the difficulties related to holding people accountable, and to accept accountability for what students themselves did or did not accomplish' (Brundiens et al., 2010, p.313). Real world learning opportunities may also help students to develop skills in relation to negotiation, interpersonal skills and reflection and the ability to ask critical questions (Brundiens et al., 2010), team working (Vijayaratnam, 2012) and higher order thinking skills (Campana and Peterson, 2010; Vijayaratnam, 2012).

Universities face the challenges of 'develop[ing] extensive and rigorous opportunities' which comply with academic criteria, 'convey key competencies, and advance students' career trajectories', are timed to fit with university semesters/terms and to identify and provide

incentives to academic staff to supervise these opportunities (Brundiens et al., 2010, p.318). As such, it is vital that there is an integrated approach to the provision of real world learning opportunities in sustainability in HE so that students, staff and community partners all benefit. Academic staff face challenges in relation to the extra workload involved in developing relationships with project partners in the community, while students are worried about meeting their course requirements and require very clear information about what is involved in a real world learning opportunity (Brundiens et al., 2010). Community partners' expectations about programme outcomes and processes should be considered alongside their knowledge of ways to engage collaboratively with scholars. Brundiens et al. (2010) emphasise the importance of clear and transparent communication, including clearly written documents, and suggest that giving community project partners the pros and cons of working with students can encourage their active participation in designing the real world learning opportunity.

## FINDINGS

Four focus groups were held with students who had studied specific modules with a real world design or assessment (see introduction for details). The four focus groups provided an interesting contrast between two groups of Biology/Ecology students (second and third year undergraduates) and two groups of parish clerks who were either studying for a degree in Community Engagement and Governance (CEG) or full time for a degree in Applied Social Sciences (ASS). The parish clerks were all in employment and combining this with either full time or part time study at Level 6 (third year undergraduate) level. These groups of students shared several common experiences of real world modules and assessments, but this section will also consider distinct themes that emerged from different groups of students.

### REAL WORLD LEARNING AND ASSESSMENT

Students commonly contrasted the real world learning they were being asked about with less applied, more 'traditional' learning and assessments. One CEG student contrasted his first degree with his current degree in this way.

*And really the skills on the first degree were nearly all academic, you do your research, you could do your reading, and you learn stuff about the specifics of it, I think by linking it [his second degree] to real life work it's not just those academic skills you learn, you learn about how to adapt it practically to the day to day environment.*

(Level 6 CEG student, part time)

Level 6 Biology students who had taken the Conservation Ecology module had a choice between an 'applied' assignment in the form of a Local Biodiversity Action Plan (LBAP) and a 'traditional critique' assignment. This distinction was often linked by these students to the ability to pursue or develop their own interests or passions.



*It's nice because I think you can tailor it [real world assessments] to something that you're more passionate about.*

(Level 6 Biology/Ecology student)

*[To] see it [the LBAP] has made a difference, definitely makes you more interested and passionate about biology as a whole.*

(Level 6 Biology/Ecology student)

*I chose the other [critique option] because for me the other choice was not really in my interests, I mean, I know it would be very handy but I like the idea of being able to choose whatever you like in terms of conservation scheme and critiquing it.*

(Level 6 Biology/Ecology student)

## **BENEFITS**

When asked about the benefits of real world learning opportunities in relation to modules and assessments, the third year CEG students commonly said that the experience had given them confidence.

*I feel a lot more confident in talking to people in general, I feel a lot more confident in group discussions, and a lot more confident in talking to small groups.*

(Level 6 CEG student, part time)

*It's changed my skillset, abilities I have to have at work to do the work I'm doing, it's changed things for me personally, my confidence, just the fact that I'm doing the degree.*

(Level 6 CEG student, part time)

For the Conservation Ecology students, there was a general consensus that having a choice in the type of assignment for the module was a positive benefit. These issues were linked by some students to the perception that the applied option was more challenging or daunting:

*[Upon being asked whether they wished they had done the critique rather than the LBAP 'applied' option:] Yes, but only for long enough that you kind of go 'oh it's so much more straightforward' but then at the same time it would just be a straightforwards assignment, doing the one I'm doing [the LBAP] it's different, it adds a bit of interest I suppose.*

(Level 6 Biology/Ecology student)

*It was good that there were two choices because I think if there were just the LBAP I would have probably struggled quite a bit.*

(Level 6 Biology/Ecology student)

*I had circumstances where ...I kind of had to do the critique...but I think I would have chosen to have done the critique, again probably because I feel a bit more comfortable with my abilities not being as good to do the LBAP.*

(Level 6 Biology/Ecology student)

Students across the four focus groups identified wider benefits to real world modules and assessments. For parish clerk students the development of their relationship to the community they served was a distinct advantage, while students studying Conservation Ecology who had chosen the Local Biodiversity Action Plan assignment could also see that there was a potential practical benefit.

*[It] has helped me with the community, too, because I have had to go out to the community a lot, they are really interested in what I've been doing.*

(Level 6 CEG student, part time)

*You can see where the impact of the research [i.e. the LBAP] would potentially go and how useful it could be.*

(Level 6 Biology/Ecology student)

## CHALLENGES

As noted above, some of the L6 Conservation Ecology students discussed a perception that real world option was more challenging compared to the 'traditional' critique. Students from the L5 Ecological Impact Assessments module also agreed that the module assessments involved more work compared to other more 'traditional' modules. However upon completing the module the students in the focus group agreed that they would recommend it to other students and that it had not actually been as hard as they had anticipated.

The parish clerks discussed the advantages of being able to complete work that was linked to their university degree. However it could also be challenging for these students to find a relevant work-related project, and this meant that there was not always a perfect fit between study and work. One student described how their need to be politically 'neutral' meant that they felt that they could not present the results of their academic work to their council.

*There's a danger that sometimes you tweak the project to fit the module.*

(Level 6 CEG student, part time)

*Because the council are split, it would have demonstrated me falling on one particular side, so if I brought it forward...to retain my neutral position, I couldn't bring it forward.*

(Level 6 CEG student, part time)

## CAREERS IN THE REAL WORLD

There was a perception by the third year Conservation Ecology students that people who wanted to pursue conservation as a career would choose the real world 'applied' assessment option and those who didn't would choose the 'traditional' critique option.

*I think if someone wanted to go down the conservation route they should do the LBAP, other than that I would just say personal choice. Because the LBAP would be very handy to show future employers that you have gone out and assessed an area and then put in your input into that might actually be used in real life.*

(Level 6 Biology/Ecology student)

For some students who had taken the Conservation Ecology module the experience had helped to confirm their career choice, while for others they were able to explore an interest that was not necessarily related to their career.

*People who want to go into conservation have chosen the LBAP one so I think it's really useful for people who want to do that definitely.*

(Level 6 Biology/Ecology student)

*It's not something I want to go down, but I'm doing a subject that I'm interested in so I'm happy. ...If it's something you want to go down I think it's a useful module to have, and again I would have chosen the LBAP if I needed to [for their career] but I didn't.*

(Level 6 Biology/Ecology student)

*But no it hasn't made me go 'oh I want to work in conservation' if anything it might have actually made me think 'I'm glad I'm not going into that' because...that sounds awful doesn't it...I don't mean it that way I just mean you don't get a lot of funding for it, you work bloody hard and it doesn't always work, I just don't have the patience for it, but I have a great respect for people who do.*

(Level 6 Biology/Ecology student)

Students made further links between the benefits of real world modules and assessments and their careers/employability. The focus groups which involved parish clerks had particularly interesting insights as the students were already pursuing careers as parish clerks. The CEG focus group discussed how they had developed increased confidence and ambition about their career progression and their perception of their ability to get larger council posts that came up. Another benefit was the increased respect that had come from being able to show how their university study was relevant to their work.

*Because you get more knowledgeable as well, they listen to you, they take you more seriously.*

(Level 6 ASS student)

*I'm confident that actually yeah I am good at my job, and I'm...willing to go that extra step further than clerks that've not done this.*

(Level 6 CEG student, part time)

*Because councillors and the community can see what you're doing, they've got more respect.*

(Level 6 CEG student, part time)

*And you show that you are interested in the job and going that bit further to find out more about your sector.*

(Level 6 CEG student, part time)

None of the Level 5 Ecological Impacts Assessments students felt that the module connected directly to their career aspirations, as many of them were interested in a microbiology pathway. However they did discuss how completing the module had helped them to broaden their horizons to incorporate wider interests such as plants and water chemistry rather than focusing solely on animals.

## RECOMMENDATIONS FOR PRACTICE

Some of the student observations from the focus groups support the perception that real world learning opportunities have quite narrow applicability in relation to careers.

- Lecturing staff should consider the potential for transferability of real world projects to a range of potential careers and how to communicate this to students.

Having a choice in assignments seems to have positive implications as it allows students with different skillsets to make a decision about the optimal choice for them. This choice may be related to perceptions of the increased challenge/difficulty of real world assignments but also their interests or career aspirations.

- Consideration should be given to how to ensure that students are not choosing the perceived 'easy option' by not pursuing real world learning options.

Having options for assignments may be particularly beneficial for undergraduate students in their final year as this is when students are specializing in subjects, allowing them to focus on their particular interests.

- Staff should communicate the potential for real world learning opportunities to shape or follow students' interests when exploring these options.

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# Chapter 6: Novel Fieldwork



## CHAPTER 6: NOVEL FIELDWORK

### INTRODUCTION

The time devoted to practical work in undergraduate degree programmes in Geography, Environmental Sciences, Biosciences and related disciplines is decreasing (Slingsby, 2007). This is largely down to the cost of such work, logistical constraints, and increasing health and safety demands. Increasing modularisation in degree programmes also reduces opportunities for practical work. This means that field trips, and especially residential field courses, are more important than ever before. Residential field trips provide excellent opportunities for students to develop their understanding of the links between theory and practice via active, immersive and enquiry-based learning (Wilson et al., 2008).

The For REAL project collected data on student perceptions of the influence of their field courses on their learning, skills development, preparation for employment and career plans. A total of 51 questionnaires were completed by second year undergraduate students attending three University of Gloucestershire residential fieldtrips which took place in the summer of 2015. Two fieldtrips took place in South Africa (one each for the Biology and Geography disciplines) and one took place in Northern Ireland (Criminology and Geography disciplines). A summary of each trip, and the novel opportunities it provided, can be seen in Table 7.1. More detail on the methodology adopted for the data collection can be found in the handbook's Methodology chapter.

**TABLE 7.1: FOCAL RESIDENTIAL FIELD TRIPS**

<b>Course and trip details</b>	<b>Summary of novelty</b>
Biology SOUTH AFRICA	The biology field course to South Africa takes students out of their biological comfort zone to experience day-to-day life on a wildlife reserve in the savannah grasslands in the Northwest Province. Students have an immersive experience, participating in land management such as controlled grassland burns and game capture, as well as using industry standard protocols to monitor ecosystem health. They also learn first-hand about the realities of poaching, especially of white rhinoceros, and patrol for snares set by poachers on the reserve. Throughout the trip, students thereby gain novel real world experiences in a very different geographical location from that which they experience during the rest of their degree.
Geography SOUTH AFRICA	The geography field course to South Africa heads down to the Western Cape. Students engage with local stakeholders on a range of different initiatives and topics, including national park management, township life, local farming initiatives and community projects. The trip brings together both human and physical geography and focuses on the interactions between these in a very different landscape, and with very different communities, than students are used to.



<p>Geography (+ Criminology &amp; Sociology)</p> <p>BELFAST</p>	<p>The Belfast field trip provides Geography, Criminology, and Sociology students with the opportunity to explore the complex conditions evident in a post conflict society. Students are given unique access to prominent local themes such as discrimination and segregation, community justice, policing, dark tourism and post industrial development. They also learn first-hand about the realities of life in Belfast and foster links that can support their future learning and development. The Belfast trip therefore provides students with important practical experience in a unique environment and opens up possibilities for undertaking research that might not be available in the rest of their degree.</p>
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## REVIEW OF FIELDWORK LITERATURE

In one of the few comparative studies so far undertaken, Eaton (2000) showed that field courses were more effective for developing deep-level understanding and cognitive skills than classroom-based learning, probably by extending students' 'affective domain' (the level to which students are capable of learning) and associated development of transferable skills (Boyle et al. 2007; Wurthmann & Conchie 2007). Well-designed field courses also provide a mechanism for teaching practical skills within the appropriate environment (Kent et al. 1997; Dillon et al. 2006) and act to bridge the lecturer-student divide to allow a more collaborative relationship that is helpful in developing advanced, critical and questioning scholars (Smith, 2004; Hart et al., 2011).

Although all fieldwork is important, residential field courses that take students out of their academic comfort zone to engage with real-world issues outside the classroom are especially vital. Taking students to a novel location and exposing them to novel issues - relating to that location or people - can be an effective way of embedding real-world learning with undergraduate curricula (Maw et al., 2011). For example, Goodenough et al., 2014 showed that UK undergraduates undertaking fieldwork in a novel location – a South African game park/reserve – not only learnt new concepts and skills relating specifically to that location, but engaged far more with concepts and skills that could theoretically have been taught in a more traditional way in the classroom. The reasons for this seemed to lie in students experiencing cognitive and geographical aspects of 'novelty space' – basically the concept that learning new concepts in new locations deepens the learning and makes it more memorable (Falk et al. 1978; Orion & Hofstein 1994; Cotton & Cotton, 2009). For example, experiential learning (sensu Kolb, 1984) can make it easier to understand key concepts than passive classroom-based learning (cognitive novelty); while a new environment can also make learning more exciting or make explicit theory–practice links (geographical novelty). This tends to be particularly so when students learn about new concepts through a new experience in a new area – for example learning about the realities of drought by talking to people and communities living and farming in a water-stressed area.

Participation in fieldwork has been shown to be useful in terms of attainment in several studies (e.g. Davenport 1998; Smith 2004; Dillon et al., 2006; Gamarra et al., 2010). More recently, the specific academic benefits of running a field trip in a novel location have been highlighted. For example, Goodenough et al. (2014) showed that students who attend a novel

field course attain higher dissertation marks than non-attending peers. This relationship holds even after controlling for each student's mean Level 5 mark to account for the possibility that stronger students were more likely to attend the field course relative to the overall cohort. Participants were also more likely to improve their degree grade between Level 5 and Level 6 compared to non-attending peers.

However, although the academic benefits of novel fieldwork (novel location, novel experiences) have previously been considered, the links between fieldwork and employability are still unclear. The For REAL project administered student questionnaires to explore student perceptions of the benefits of fieldwork in relation to preparation for employment and influence on their career plans for three University of Gloucestershire fieldtrips that took place in the summer of 2015.

## FINDINGS

### SOUTH AFRICA (BIOLOGY) FIELDTRIP

22 student questionnaires were completed for the South Africa (Biology) field trip. Students were asked about what biological concepts/ knowledge they had learned about on the trip. The most frequently provided responses were reserve management/burning (16 responses), tracking (11 responses), poaching (ten responses), knowledge about specific species/identifying species (eight responses), conservation (seven responses), and animal behaviour (five responses).

When asked about the skills they developed on the trip, the most frequent response was teamwork (nine students). Seven students also mentioned skills allied to interpersonal relationships, such as cooperation, tolerance, communication, compromise and patience. Other frequently mentioned responses were tracking (seven students), time management (five students) and identification of animal and insect species (five responses).

Students were asked whether the concepts/knowledge or skills they had developed on their fieldtrip could have been learned in a different environment. Students were more likely to name particular concepts/knowledge rather than skills in response to this question. Table 6.1 provides a summary of the responses given by students who completed the questionnaire. They provided 10 examples of biological concepts/knowledge that they thought they could not have learned about in a different environment (the most popular being reserve management, tracking, habitat/grassland management and conservation), and examples of five skills that they believed they could not have developed in a different environment (the most popular being tracking and animal ID).

**Table 6.1: Students identified concepts/knowledge that they could not have learned in their home environment (or learnt better relative to what would have been possible in their home environment) (Biology)**

Concept/knowledge	Could not have learned about in a different environment	Learnt better on this trip compared to different environment
Reserve management	7	6
Tracking	5	5
Habitat/grassland management	5	4
Conservation	3	1
Poaching	2	3
Ecology of African species	2	1
Large mammal transects	1	1
Animal behaviour	1	1
Field techniques	1	1

N=22

Students were also asked about the concepts/knowledge or skills they thought they had learned better on their trip compared to a different environment. Table 6.2 shows that students identified 11 concepts/areas of knowledge they thought they had learned better, including reserve management, tracking, habitat management and poaching. The most popular responses in relation to skills that had been learned better were teamwork (three responses) followed by animal identification, tracking and compromise/patience (two responses). There was some overlap in student responses to questions about knowledge/concepts and skills for the categories of tracking and field techniques.

**Table 6.2: Students identified skills that they could not have learned in their home environment (or learnt better relative to what was possible in their home environment) (Biology)**

Skills	Could not have learned about in a different environment	Learnt better on this trip compared to different environment
Animal identification	3	3
Tracking	2	2
Teamwork	1	3
Time management	1	
Compromise/patience	1	2
Cooperation		1

Tick drags	
Prioritising	
Observation	
Animal management	
Field techniques	

N=22

Students were asked how useful the trip had been in their preparation for employment. For the South Africa (Biology) fieldtrip, the average score given was 4.05. When asked to comment on this score, students gave a variety of responses. For some students, the experience helped to confirm their career choice, while others talked about how they had gained skills, especially in relation to working with others or in new environments.

*It's made me think I want a career in conservation.*

*Fantastic to be able to talk about this experience in interviews or having skills of different cultures and spending a lot of time with people I don't know too well.*

*Not the area I want to work in, but useful skills gained.*

Half of the South Africa (Biology) fieldtrip students said that the trip had influenced their career plans (eleven students). When asked to explain, popular responses included that the trip had encouraged them want to work abroad (three responses), volunteer abroad (three responses), work in conservation (five responses) or work in a game reserve (three responses). Students also wrote about how their experience of the fieldtrip had helped them to consider or confirm their career options.

*It's influenced where I want to volunteer after uni and given me experience to follow this through.*

*Opened up other possible options (hadn't considered before).*

*I already wanted to work on a reserve but now I have more confidence to pursue it.*

Student enjoyment of the South Africa (Biology) fieldtrip was extremely high, with an average score of 4.91/5. When asked what was valuable about the experience, students wrote most frequently about the rhino poaching/conservation aspects of the trip (seven responses).

*Was great to see animals in their natural habitat and to learn about real world issues such as rhino poaches.*

Suggested improvements for the South Africa (Biology) fieldtrip included having more free time/more time (six responses), having more/optional activities (four responses) and having an internet connection (four responses).

*Would have been nice to have stayed longer with more free time or optional activities to tailor to interests more.*

*Having internet can help aid our understanding and knowledge.*

When asked if they had any further comments, students were uniformly positive about their experience on the South Africa (Biology) fieldtrip.

*Loved this once in a lifetime experience and have a new respect for conservation.*

*Never stop! Learn so much because in a new and exciting location - learn loads!*

## **SOUTH AFRICA (GEOGRAPHY) FIELDTRIP**

24 questionnaires were completed for the South Africa (Geography) field trip. As with the Biology field trip, the first question considered the concepts and knowledge they had gained as a result of the trip. Responses centred on the following concepts: apartheid (13 responses), the geology of mountains and their impacts on development (seven responses) social enterprising (six responses) and water shortage (four responses). Impact investment, colonialism and townships were also mentioned.

Students were then asked about which skills the trip had developed and the most frequent responses were team work (16 responses) and note-taking (13 responses). There were also comments relating to confidence building activities, such as approaching people for data collection (six responses) and giving presentations (four responses).

Two of the questions explored how the environment students were in effected the skills they learnt, and tried to determine which skills could not have been learnt at all and which were enhanced by the environment they experienced on the trip. Often responses related more to increasing knowledge of particular concepts rather than a specific skill that had been gained, and Table 6.3 provides a summary of these data. There were 11 concepts or areas of knowledge students felt they could not have learnt in a different environment (the most frequent being Apartheid and personal accounts from South Africans) and 6 concepts they learnt better on this trip as a result of their environment with the most frequent response being Apartheid. Other responses included cultural and racial differences and the geology of South Africa, which like many other areas of knowledge shared an overlap between these two questions, with some students stating that their answers applied to both.

**Table 6.3: Students identified concepts/knowledge that they could not have learned in their home environment (or learnt better relative to what would have been possible in their home environment) (Geography)**

Skill/knowledge	Could not have learned about in a different environment	Learnt better on this trip compared to different environment
Apartheid	5	4
Personal accounts	4	2
Cultural/racial differences	2	2
Geology of South Africa	2	2
Townships	2	0
Independence	2	0
Economic disparity	1	1
Tourism in a foreign country	1	1
Climates	1	0
Evidence of drought	1	0
History of South Africa	1	0

N=24

The question asking how useful the trip was for employment asked students to give a ranking from 1-5. An average score of 3.4 was given. Students were also asked to give explanatory comments and said that the trip had increased their ability to work to deadlines and collect data in a foreign country.

*Field experience and knowledge of surroundings in a foreign country.*

*Useful for preparing for team presentations in short time and tailoring questions to find out specific information.*

*Has given me the experience of working in unfamiliar conditions with strict time constraints, and enabled me to adapt to new issues.*

10 of 24 Geography students said that the trip had influenced their career plans, with many of these suggesting that they would now like to work abroad (seven responses). Other responses suggested students had either had their interests confirmed or had been inspired

to take a new direction that focused on the various issues focused on during the South Africa field trip.

*Has reiterated plans to work within development and tackle divisions in wealth.*

*Made me rethink the option of undertaking a career path in tourism and strengthened my interest in global agriculture and differences between countries.*

*Inspired me to look into jobs around conservation or environment.*

Student enjoyment was almost as high as the Biology South Africa field trip (4.81/5) with a heavy emphasis on being able to speak to locals about their experiences, and enjoying a completely different environment.

*Seeing a different country, really enjoyed all the places we visited.*

*Most valuable aspect was meeting people who live in townships.*

Most of the suggestions for improvements to the trip were related to having more free time (five responses) or better scheduling of time (four responses).

*Need more free time to investigate own interests.*

*Day between Mossel bay and Stellenbosch was wasted with a 10hr coach journey.*

Finally the last question asked for any additional comments and received a range of overwhelmingly positive responses.

*The budget was stretched extremely well and value for money was phenomenal. Having most of our meals accounted for along with accommodation that was extremely comfortable. The staff were excellent and laid back yet professional when required and made my trip a memorable one along with a top group of friends.*

*Thankful that trips like these are available to us as a useful learning resource.*

## **BELFAST (CRIMINOLOGY) FIELDTRIP**

A total of 7 Questionnaires were completed for the Belfast (Criminology) field trip, with the same questions being asked as for the Biology and Geography field trips. Students felt they had learnt about the following criminological concepts on the trip: restorative justice (five responses), Conflicts within Northern Ireland (three responses) policing methods (three responses) and segregation (two responses). Other concepts mentioned included emigration, community projects, industrial action and fortress cities.

With regards to the skills the trip had developed teamwork (three responses) and communication skills (two responses) were mentioned multiple times. Students also mentioned independence, social research and note taking.

The questions exploring how the environment had impacted the skills developed were generally answered with statements of increased knowledge in an area rather than an entire skillset. Students gave four areas of knowledge as examples that could not have been learnt in an alternative environment. These were segregation, Irish history, conflict and distinguishing the English and Irish police forces. It was also mentioned that understanding and insight were improved by being in Northern Ireland. Segregation and visiting the police in Ireland were mentioned as concepts that were better learnt on this trip compared to a different environment. One student also said that being somewhere other than England made the trip more interesting and engaging.

An average score of 3.9 out of 5 was given regarding how useful the trip had been in preparation for employment. Some of the comments made in response to this question mentioned police work or restorative practices.

*It has given an insight into police work in Northern Ireland and what they look for in recruits.*

*Gained valuable work experience as a research assistant and got industry insight into restorative practices and the police service.*

Students were mostly unsure whether the trip had influenced their career plans but they still gave several comments that suggested it had at least opened new doors or possibilities.

*Has made me more interested in joining the police.*

*Watching the dog handlers made me think about pursuing a career in dog handling.*

*The Irish police force looks harder and working with them would be more rewarding.*

Students gave an average score of 3.9 when asked how much they had enjoyed the trip on a scale of 1-5, and they found the opportunity to witness things first hand particularly valuable.

*Having VIP trips with people that would be very difficult to talk to. To hear first hand experiences was great.*

The only suggestions for improvements came from one student who said that they would to see the activities condensed into fewer days and they would prefer twin dorms next time. Final comments made were overall very positive.



*Having a lecturer local to the area enabled us to have a valuable and realistic experience of the two communities we were following. I did not feel a tourist here but an active member within the city.*

*I found Belfast a fascinating place with very interesting history. It is definitely an excellent destination for a criminological field trip.*

### IMPLICATIONS FOR PRACTICE

The academic benefits of residential fieldtrips have already been considered in the literature, but these findings indicate that students also perceive employability related benefits for fieldwork that takes place in a novel location. This implies that it may be beneficial to emphasise potential links to employability (in relation to confirming career choice, exploring new career options or gaining useful overall experience) when recruiting for residential field courses.

Given these potential additional benefits in relation to future career prospects, HEIs may also wish to consider ways in which they can facilitate student attendance where finance is a factor, for example through the use of bursaries, payment plans, etc.

When planning fieldwork activities staff should consider the potential benefits of residential field courses that take place in a novel location for employability and confidence building as well as potential academic benefits.

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# Chapter 7: Conclusions & Recommendations



## CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

### INTRODUCTION

The 'For REAL' (Forming Resilience and Employability through Authentic Learning) project, funded by the Higher Education Academy, sought to evaluate the effectiveness of real world teaching and learning initiatives in relation to student experience, attainment and employability at a UK HEI (the University of Gloucestershire). This final handbook chapter provides an overview of the project, its key findings and the resulting recommendations for practice.

### PROJECT OVERVIEW

This research was developed in response to the limited evidence base on whether and to what extent authentic learning improves the student experience. We define 'authentic learning' as any teaching and learning activity that takes place within a 'real world' setting.

The For REAL project collected student data through focus groups, interviews and questionnaires across three student cohorts and multiple courses in Geography and allied disciplines at the University of Gloucestershire between May 2014 and June 2015. More detail on the methods adopted for the project can be found in Chapter 2.

The focal authentic learning initiatives examined by the project included:

- a) Internships (project undertaken with external partners as 'clients')
- b) Placement-based dissertations
- c) Embedding real-world assignments in modules (linked to external agencies)
- d) Innovative fieldwork (working on novel, on-going, research projects)

Detailed findings for each of these initiatives can be found in Chapters 3-6.

In relation to this handbook, the project's objectives were as follows:

- 1) To evaluate the effectiveness of initiatives in relation to student experience, attainment and employability
- 2) To generate recommendations for making initiatives optimally effective for all concerned

This chapter provides a summary of the key findings for each initiative considered in the handbook before going on to outline recommendations for practice.

### SUMMARY OF KEY FINDINGS

Some findings were common to two or more of the real world learning initiatives considered in Chapters 3-6. The real world learning initiatives considered across the four

handbook chapters were a uniformly positive experience for students who had completed them. Students identified specific benefits in relation to organisational skills, confirmation of their area of interests and the contacts made with outside organisation, including the additional career-related opportunities this could afford them. Students consistently relayed examples where their experiences of specific initiatives had generated potential employment opportunities that may have been unforeseeable at the outset, but also provided examples of how their work had been of wider benefit to the community.

Engaging with authentic learning was seen as an additional challenge or as additional work for students and while for some this was an attraction, for others this was perceived as a potential barrier either for themselves or for other students. This may be related to the level of confidence that students have in relation to their own capabilities or the support given to them by their HEI. Meeting the challenge of authentic learning was a common confidence-booster for students who had completed a specific real world learning initiative. Students discussing how decisions are made regarding optional real world learning initiatives indicated that providing more information about the initiative and the way it is assessed might encourage more students to choose these options.

Students taking part in the For REAL research generally found that taking the internship module aided them in clarifying their interests. Several students argued that more explanation of the module and the flexibility and opportunities it afforded would have encouraged them to take it as a study option. The internship itself can be challenging for students to set up, particularly in relation to making contact with external organisations. The module was seen as creating an additional challenge, which for some students was intimidating, while for others it heightened their sense of achievement and growth upon completing it.

Interviewed students highlighted the employability-related benefits of completing a placement-based dissertation. For some students, placement-based dissertation research was beneficial for their organisational skills, while for one student this was an additional challenge. Students also stated that doing a dissertation could help with skills development, increase their confidence, and confirm work-related interests, although this appeared to be applicable for both placement-based and 'traditional' dissertations. Three students discussed their perception that a placement-based dissertation involved more work compared to a 'traditional' dissertation.

## RECOMMENDATIONS FOR PRACTICE

The project findings imply a range of recommendations for practice in relation to internships, placement-based dissertations, real world modules and assessments and novel fieldwork which are given below. In addition, overall recommendations for HEIs, lecturing staff, students and outside organisations facilitating real world learning initiatives are considered.

## INTERNSHIPS

Some students felt there was not enough information given on the internship module, which may have prevented some students from choosing it. There was also a perception that other modules would give more in-depth subject knowledge or a higher grade. It may be beneficial if time was allocated for lecturers to discuss internships in detail (including support arrangements and timescale) and seek to draw out and dispel any myths or assumptions. This might involve exploring the role of grades in relation to learning and other potential positive outcomes such as employability. The role of university staff in supporting and advocating the possibilities of internships is important.

Retrospectively, some students who did not do the internship module showed signs of regret after hearing the positives from their cohort. It seems likely that it would be beneficial for internship uptake to bring in a student/s who have previously completed an internship to discuss their experiences.

Sufficient time should be given to students to allow them the opportunity to formulate internship ideas/interests and to make initial contacts. Including some formality into this process may encourage uptake of internship opportunities, for example a reflective learning session. This could be focused on career aspirations/interests and how an internship might help them to develop these or what other options are available to them. Alternatively, it could involve seeking to identify their interests and how an internship might help to develop this interest. The role of peer testimony from students in previous years may be particularly valuable here.

The optional nature of internships at this institution means that some students will not choose an internship. It is for individual institutions to decide whether or not an internship has the potential to be beneficial for every student, or whether including internships as a compulsory option could lead to a lack of motivation and a poor outcome for some students.

## PLACEMENT-BASED DISSERTATIONS

Students who had completed a placement-based dissertation clearly appreciated the potential benefits in relation to their future employability. Institutions should therefore highlight these potential benefits when providing students with information about their options in relation to placement-based and 'traditional' dissertations. It may also be beneficial for students completing a placement-based dissertation to consider how they can utilise the employability/networking opportunities that this affords.

Working with outside organisations can generate both benefits and challenges for students in relation to the possibility of additional support and the perception that more work is involved when compared to a 'traditional' dissertation. HEIs and students should therefore consider the capacity of each potential placement organisation & staff to provide effective

student support and the implications for student/staff workload of working with an outside organisation.

## NOVEL FIELDWORK

The academic benefits of residential fieldtrips have already been established in the literature, but these findings indicate that students also perceive employability related benefits for fieldwork that takes place in a novel location. This implies that it may be beneficial to emphasise potential links to employability (in relation to confirming career choice, exploring new career options or gaining useful overall experience) when recruiting for residential field courses.

Given these potential additional benefits in relation to future career prospects, HEIs may also wish to consider ways in which they can facilitate student attendance where finance is a factor, for example through the use of bursaries, payment plans, etc.

When planning fieldwork activities staff should consider the potential benefits of residential field courses which take place in a novel location for employability as well as potential academic benefits.

## RECOMMENDATIONS FOR HEIs

Real world teaching and learning initiatives generate student employment opportunities that may be unforeseeable at the outset. This means it is in HEIs' interests to support such initiatives.

HEIs should seek to support staff to effectively broker and support HEI-student-outside organisation partnerships. They should also support staff to provide information about the potential benefits of real world learning and address students concerns in relation to issues such as the perception of additional work, and uncertainty around assessment processes or outcomes.

HEIs should consider ways to address barriers such as cost or work or family commitments that may prevent students from being able to choose real world teaching and learning opportunities, for example providing bursaries or flexibility in relation to timescales.

## FOR TEACHING STAFF

Given the established benefits of authentic learning initiatives, teaching staff should consider ways in which they can best support/encourage students to choose these options. This should include seeking to provide full information on timescales and assessment processes and to address any misinformation or potential concerns. This could include sessions with

students who have previously taken a particular initiative or employers who have worked with students in previous years.

Teaching staff also need to consider ways in which they can effectively support students to identify, choose and develop their real world learning projects without compromising student initiative and ownership of said projects. In addition attention should be paid to ensuring that outside organisations have the necessary information about the potential benefits of authentic learning initiatives to confirm that they are committed to producing a successful experience for organisation and student alike.

#### FOR STUDENTS

This project has identified several potential benefits of real world learning for the student experience of Higher Education. There has been an almost uniformly positive experience for students involved in this project who were asked about their experiences of authentic learning initiatives such as internships, placement-based dissertations, real world modules and assessments and novel fieldwork. This means that students should consider the advantages of such choices not only in their context of their degree study, but also in relation to wider opportunities in relation to their own career and employability, and links to their community.

#### OUTSIDE ORGANISATIONS

There are clear potential benefits for outside organisations involved in the provision of real world teaching and learning initiatives, including the opportunity to explore additional projects and to identify and recruit potential new employees or volunteers. In order to ensure a positive experience for organisation, student and HEI, careful consideration should be given to issues of supervision, support, flexibility and assessment.



# Appendices



## **APPENDIX A.1: FOCUS GROUP SCHEDULE: INTERNSHIPS**

### **Focus group questions**

#### **Introduction to focus group**

Hello and thanks for being here today. Today we'll be asking you to reflect on your experiences of your course and the modules you have chosen. This should be useful to you when it comes to submitting your next assignment on the module, the reflective essay.

We'll be asking you some questions to start things off but we are keen to make this a group discussion, so please do talk to each other and compare experiences as well as responding directly to the questions. There are no right or wrong answers, and we are interested in hearing about everyone's views and experiences.

We'll be recording our discussion but **all information will be anonymised** before it is seen by anyone else. This includes people involved in marking your work. You can choose not to answer particular questions and you can also withdraw from the research at any time. You can also find more information about how we will use the information collected here on the consent form.

Are there any questions so far?

**Now go through consent forms.**

## Questions

1. What have you got out of doing your degree?
2. How ready do you feel for post-degree life? What impact has your course had on this? What do you think you still need to be prepared for this? (Focus on skills and content)
3. I understand that some of you have done the internship module (NS5001) and some haven't. What would you say are the advantages and disadvantages of doing the internship module? Was there anything preventing you from doing this (barriers) or making it difficult to do this module (hurdles)?
4. (For internship students) Can you talk me through how you chose your internship? How did you find the experience? Have there been any unexpected benefits...or difficulties of doing the internship module? Can you give an example of how you approached any problems or challenges that came up?
5. What would you advise other students who are thinking about doing the internship module? What do they need to know?
6. How has doing/not doing the internship module affected your overall degree, e.g. has it changed your overall skillset? (subject-specific and transferable)? (NB for non-internship students, get them to reflect on skills gained from module they did instead of the internship module and/or what their perceptions are of the internship module and work related learning).
7. Thinking about your career, has doing this module (internship vs non-internship module) affected what you would like to do & your confidence/ability to pursue this? Do you think that it affected your outlook in relation to employment? How? Why? (Networking?)
8. What did you think of the timing of the internship module (second year vs third year)?

Final question: Are there any additional things that you feel are important about your experience of your degree that you'd like to mention?

## **APPENDIX A.2: INTERVIEW SCHEDULE – REAL WORLD MODULES AND ASSESSMENTS**

### **Focus group questions**

#### **Introduction to focus group**

Hello and thanks for coming along today. Today we'll be talking about your experiences of doing 'real world' modules and assessments as part of a research project which is looking at the learning experiences of students doing 'Real World' learning activities.

We'll be asking you some questions to start things off but we are keen to make this a group discussion, so please do talk to each other and compare experiences as well as responding directly to the questions. There are no right or wrong answers, and we are interested in hearing about everyone's views and experiences.

We'll be recording our discussion but **all information will be anonymised** before it is seen by anyone else. You can choose not to answer particular questions and you can also withdraw from the research at any time. You can also find more information about how we will use the information collected here on the consent form.

This session will take a maximum of one hour, but please let us know if you need to leave earlier so we can make sure that we have covered the key discussion areas. Are there any questions so far?

**Now go through consent forms.**

## Questions

1. What have you got out of doing your degree?
2. How ready do you feel for post-degree life? What impact has your course had on this? (Focus on skills and content)
3. What are the advantages and disadvantages of doing a module which focuses on a specific 'real world' issue? Was there anything preventing you from doing this (barriers) or making it difficult to do this module (hurdles)?
4. How has doing (name of module) affected your overall degree, e.g. has it changed your overall skillset? (subject-specific and transferable)?
5. Can you talk me through how you chose your option and focus for Assessment X for this module?
6. What would you advise other students who are doing (name of module) next year? What do they need to know in relation to choosing their option for Assessment X and how they approach this assignment?
7. What has your experience been of choosing and researching assessments based on real world issues & opportunities? What challenges and opportunities has it given you? (Distinguish here between the module itself and the specific project.)
8. Have you enjoyed choosing and researching assessments based on real world issues & opportunities? (Focus here on experience rather than "benefits".)
9. Have there been any unexpected benefits...or difficulties of basing assessments on real world issues & opportunities? Can you give an example of how you approached any problems or challenges that came up?
10. Thinking about your career, has doing this module affected what you would like to do & your confidence/ability to pursue this? Do you think that it affected your outlook in relation to employment? How? Why? (Networking?)
11. Final question: Are there any additional points things that you feel are important about 'Real World' modules such as (name of module) that you'd like to mention?

## **APPENDIX B: INTERVIEW SCHEDULE: DISSERTATIONS**

### **Interview questions**

#### **Introduction to interview**

Hello and thanks for coming along today. Today we'll be talking about your experiences of doing your dissertation for a research project which is looking at the learning experiences of students who did a placement-based or a 'traditional' dissertation as part of their degree. There are no right or wrong answers, and we are interested in hearing about everyone's views and experiences.

I'll be recording our discussion but all information will be anonymised before it is seen by the rest of the research team. You can choose not to answer particular questions and you can also withdraw from the research at any time. You can also find more information about how we will use the information collected here on the consent form. Are there any questions at this point?

#### **Questions**

Can you talk me through the decision making process you went through when choosing whether to do a placement-based or a 'traditional' dissertation?

How did you choose your dissertation placement/dissertation topic?

What would you say are the advantages and disadvantages to doing a placement-based/ 'traditional' dissertation?

What challenges and/or opportunities did doing your dissertation give you?

How has doing a placement-based/'traditional' dissertation affected your overall degree, e.g. has it changed your overall skillset? (subject-specific and transferable)

Thinking about your career, has doing your dissertation affected what you would like to do & your confidence/ability to pursue this? Do you think that it has helped you to prepare for employment?

Final question (if time!): Are there any things that you feel are important about doing a placement-based or 'traditional' dissertation that you haven't had a chance to mention?

## APPENDIX C: FIELDWORK QUESTIONNAIRE

You have just experienced fieldwork in a novel location, and we would welcome your feedback. The results from this questionnaire will be used to inform planning for future fieldtrips. Your reflections will contribute to a research project exploring the learning experiences of students taking part in 'Real World' learning opportunities such as this trip.

1. What biological concepts or knowledge have you learned about on this trip?
2. What skills have you developed on this trip? e.g. team working
3. Have a look at your answers to questions 1 and 2 above. Are there examples that you feel you could NOT have learned about in a different environment? If so, please list:
4. Again thinking about your answers to questions 1 and 2, are there any examples where you feel that you learnt these BETTER on this trip than in a different environment (e.g. on a UK-based trip)? If so, please list:
5. How useful has the field visit been to your preparation for employment? Please rate on a 1-5 scale (1=not at all, 5=very much) & briefly comment, if you'd like
6. Has attending this field course influenced your career plans? Please explain
7. How much have you enjoyed the trip? Please rate on a 1-5 scale (1=not at all, 5= very much)
8. What was valuable about the experience, and what – if anything - could have improved it?

Any other comments you would like to make re your fieldwork & learning in a novel location?

## APPENDIX D: INFORMED CONSENT FORM



### Participation Consent Form: FOR-REAL project

I understand that my participation in the University of Gloucestershire project will involve responding in a focus group/interview/ questionnaire format. These questions and discussions will involve issues of learning and employability in Higher Education.

I understand that my participation in this study is entirely voluntary. I understand that I am free to ask questions at any time or to discuss my concerns with Anne Goodenough, Course Leader for Biosciences, Kenny Lynch, Course Leader for Geography, or James Derounian, Course Leader for Community Engagement & Governance, at the University of Gloucestershire (Contact details below), or the University's Helpzone service.

I understand that the information provided by me will be held confidentially, such that only the project team (Mel Evans, Will Hurley, Hazel Roberts, Anne Goodenough, James Derounian and Kenny Lynch) will see the completed questionnaires. I understand that no staff involved in marking my work will see the questionnaires prior to them being anonymised before my marks have been agreed and confirmed formally at a University exam board. My comments will be held in confidence and will be anonymised prior to any electronic or paper-based publication. I understand that in accordance with the Data Protection Act this information may be held indefinitely.

I understand that I can withdraw from the study at any time and for any reason during the data collection period (May 2014-June 2015). Withdrawal after the study has been written up and published will not be possible. Finally, I understand that at the end of the study I can be provided with a summary of the research if I request it.

I, (please print name).....

consent to participate in the above outlined study.

Signed:.....

Date: .....

Email address:.....