

Improving formal research training: developments at NUIMaynooth, Ireland

Adrienne Hobbs · Elaine Burroughs ·
Jackie S. McGloughlin

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Abstract As elsewhere, Irish universities are now actively rethinking the PhD degree and striving for improved student experiences and outcomes. We present here a student perspective on reform in the Irish system, using the case of the Department of Geography at the National University of Ireland Maynooth for illustration. Specifically we focus upon the introduction of compulsory and formal graduate education modules. We argue that formalised research training is worthwhile; however, we call attention to the importance of the student's autonomy and stress the importance of maintaining flexibility for the individual researcher.

Keywords PhD · Ireland · Maynooth · Graduate education modules (GREPs)

Geography Department in Ireland which has been active in restructuring its PhD programme, the Department of Geography at the National University of Ireland Maynooth (NUIMaynooth). At the heart of this restructuring was the introduction of compulsory and formal graduate education (GREP) modules. We present here perspectives on this restructuring from staff and from the first batch of students at NUIMaynooth who encountered the new programme. We believe these perspectives help to inform debate in Ireland, and beyond, regarding the coupling of PhD research projects with formal GREP modules. We argue that formalised research training is worthwhile; however, we call attention to the importance of the student's autonomy and stress the importance of maintaining flexibility for the individual research project.

Introduction

As elsewhere, Irish universities are now actively rethinking the PhD degree and striving for improved student experiences and outcomes (Demeritt 2004; Enders 2005, Bitusikova 2009; IUQB 2009). We are past and current doctoral students based in a

The PhD programme at NUIMaynooth

NUIMaynooth is a small but rapidly expanding third-level institution with more than 9,300 students. Based on staff and student FTE measures, the Department of Geography at NUIMaynooth is one of the largest in the university and one of the largest in the country. Our case study examines students' experiences of the Department of Geography's transitioning and emerging PhD programme. This programme requires PhD students to complete credit bearing taught modules, incorporating training in theory, methodology,

A. Hobbs (✉) · E. Burroughs · J. S. McGloughlin
Department of Geography, National University of Ireland
Maynooth, Maynooth, County Kildare, Ireland
e-mail: adrienne.m.hobbs@nuim.ie

Table 1 Current NIRSA GREP as compared with Focus Group students' wishlist

Research training themes		Year 1	Year 2	Year 3
Theory	GREP ^a	Critical thinking/social theory ^b		
	Wishlist	Theory (2 ECTS)	Thesis development (1 ECTS)	
Methodology	GREP	Advanced methodologies ^c	Advanced methodologies	Advanced methodologies
	Wishlist	Methods (2 ECTS)	Methods (2ECTS)	–
Specialised options	GREP	Advanced specialised options ^d	Advanced specialised options	–
	Wishlist	Advanced specialised modules (2 ECTS)	Advanced specialised modules (2 ECTS)	–
Professional development	GREP	Professional skills ^e	Professional skills	
			Teaching skills	
	Wishlist	Career development (2 ECTS)	Career development (1 ECTS) Presentation (1 ECTS) Publication (1 ECTS)	Career development (1 ECTS) Seminar PhD graduates (IECTS) Viva information (1 ECTS)
Research design	GREP	Parts of professional skills	Parts of professional skills	Parts of professional skills
		Project management (1ECTS)	Project management (1ECTS)	Project management (IECTS)
		Research design: (1ECTS)	Writing (1 ECTS)	Write-up course (1ECTS)
		Aims and objectives (1ECTS)	PhD citation (1 ECTS)	
		Conceptual framework (1ECTS)		
Extended holistic training	GREP	Summer school ^f (includes theory and methodology)	Summer school (includes theory and methodology)	Summer school (includes theory and methodology)
		As above	As above	As above

^a Existing GREP modules carry 5 ECTS. 1 ECTS—circa 4–5 h contact time and 20 h of extra class study

^b Critical thinking, social theory: the nature of social theory and the importance of incorporating philosophical thinking in research are explored. Meta-concepts of space, governance, the body as they have been conceptualised by different schools of thought are discussed

^c Advanced methodologies: a researcher explicates, with participatory pedagogies, the methodology they have applied in a specific project. The intention is to examine how researchers formulate their research questions and generate data for their projects

^d Advanced specialised options: research and theory concerning specific topics such as migration, youth and balanced development are discussed through a series of workshops and seminars delivered by a speaker in a masterclass setting

^e Professional skills: This module focuses on research planning, information sourcing and management

^f Summer school: a week long summer school bringing together social science PhD students from across the island of Ireland

substantive/specialised topics, professional development, research design, and then summer and winter schools where all of the above are brought together in holistic training packages (Table 1). Module weightings are calibrated according to the European Credit Transfer and Accumulation System (ECTS), with each module being worth 5ECTS (normally 24 h contact time with a further 100 h of out of class activity). Depending upon their topic students are expected to accumulate between 30 and 60 ECTS during the course of their PhD; most students accumulate the majority of their credits in the first 2 years.

Our analyses draws evidence from a questionnaire survey we conducted, a focus group, and our own personal experiences of GREP modules. Questionnaires were emailed to NUIMaynooth's 33 geography staff members, 13 recent doctoral graduates and 40 current doctoral students of the Department of Geography. 18 % of staff, 54 % of recent graduates and 18 % of current doctoral students responded with completed questionnaires. To complement this questionnaire, a focus group was conducted with students. The focus group discussion provided a forum for students to make recommendations about how to best

ease transition when a university first implements formal structured training. Ten postgraduates (approximately 25 % of current NUIM geography postgraduates) took part, including the authors, who also acted as facilitators. Whilst GREPs modules are now mandatory for all registered students our research was conducted at a moment when these modules were being first piloted and introduced. Our analyses then captures the views of three types of students: those involved in compulsory GREPs in conjunction with funding commitments; those voluntarily opting to take modules and those not participating in formal GREPs.

Benefits and drawbacks of the new programme

In a European context, traditionally research skills have been gained through individual exploration (Hockey 1995; Adams 1999). Today these same skills are often learned through taught programmes aimed at the general needs of postgraduate researchers (Enders 2004). Enders (2005) and Cowen (1997) highlight the tensions between the traditional Humboldtian PhD model, sometimes called the master-apprentice model (Enders 2004) and the contemporary PhD model (where generalised, broad-based research training is a priority). The Humboldtian model of education values freedom in that “professors must be free to teach truth and knowledge as they see it, and the students must be free to learn independently” (Pritchard 2004: 510). Within the Irish context, this has manifested as PhD students learning while conducting their research on an individual basis—with guidance by their supervisors—rather than through structured modules administered by academic staff from multiple disciplines. Similarly, Kant posited that “philosophy is something you *do*, rather than something you are *taught*” (emphasis in original) (Ross 2005:77).

Within NUI Maynooth there was support for the shift towards formal training classes; however, only half of academic staff respondents agreed that participation should be mandatory for all students. The remainder of academic staff respondents preferred to retain autonomy and recommend that the level of student participation be determined by the supervisor and student. Differences of opinion on a related issue emerged from the postgraduate focus group. Human geography students partaking in formal training at NUI Maynooth often take modules which are offered as part of a suite

of *social science modules*. Those who took these modules felt pressure for their PhD thesis to be interdisciplinary in nature (ZumBrunnen and Cheong 2009:190). Of course there is benefit to this pressure. An interdisciplinary approach may allow researchers to better tackle research problems and to speak to audiences inside and crucially outside of their own discipline (Enders 2004). But equally Solem and Foote (2009) stress the importance of geography-specific training for geographers. Conversely, participants not part of any formal training or GREPs made it clear that they felt no obligation to grapple with another discipline. One participant stated “I don’t feel a pull from other areas. Certain supervisors might push in certain directions but mine is quite set, ‘there’s your PhD, off you go’!” Clearly a balance needs to be struck between both general and disciplinary training. Our point is that GREPs may end up unwittingly tilting this balance in a direction which fails the student.

Formal training modules facilitate intellectual development, creative thinking and peer support. Overall, staff and students involved in formal training considered GREPs to be beneficial to research students. Doctoral students participating in GREPs were required to write thesis related essays and as a consequence began thesis writing in year one of their PhDs. Also, modules provided the opportunity to discuss and extend individual research topics as well as the space and time to analyse and discuss a range of geographical topics. This chance to communicate, profile and critique their research project with both fellow PhD students and academic staff is beneficial to students’ initial intellectual academic development. It also operates as a forum to exchange ideas and further develop concepts. Attendance at modules facilitated a sense of a postgraduate community extending through NUI Maynooth and other Irish institutions. We concur then with the claim that peer support “enriches the programme” (Taylor 2008:68) and “encourage(s) interdisciplinary dialogue and fosters creative thinking and innovation” (Bitusikova 2009:205). It also lays the groundwork for collegial relationships which are an important part of academia (Nellis and Roberts 2009). This intangible benefit was mentioned by many focus groups participants. One student stated “I came away from the module classes feeling part of a group, no longer feeling so isolated as I did when I began the PhD.”

With the introduction of any new programme, aspects requiring improvement will inevitably be identified. Thus, the following section tracks a critical reflection of the introduction of formal training at NUIM. The most noteworthy issue expressed by students and staff concerned the establishment of formal training itself. Concern was expressed by some questionnaire respondents and also at the focus group that the geographic discipline is too diverse to be covered in these modules. Disquiet was expressed that attendance at GREP modules at NUIM was not compulsory for all at the outset. A more standardised approach within a university *from the very start* might ease the transition to more formal research training. This is linked to concern felt by some over the credits attached to different modules. At the moment students attending formal training modules acquire credits. Juxtaposing the old model with the new programme prompts questions: Is a PhD, which is acquired without module credits, less valued than one with module credits attached? Is a PhD, which is achieved without module credits, sufficient in the Ireland labour market place, or indeed abroad?

Finally, apprehension was expressed that modules add extra pressure and some students can become sidetracked from their own research as a result of partaking in formal training. Many felt that the balancing act between research projects and normal academic teaching pressures is compounded by the added pressure to participate in formal training modules, whilst still working to complete the PhD within a 3-year time period. This was also found in the United Kingdom (Demeritt 2004) and is noted by Graves (1997). Imminent module assignment deadlines must be prioritised and this could delay completion of the PhD research project.

The introduction of formal training was a paradigm shift for the NUIM Department of Geography and indeed still appears to be evolving. Many believe that the programme needs to be refined, structured, and more regulated. Inevitably, a new PhD training format will give rise to differing interpretations as far as quality and standards are concerned. Focus group participants underscored the importance of their input into the evolving doctoral programme; rather than participants being advised of requirement changes mid-stream during their doctoral studies.

Recommendations for geography departments transitioning into formal training

Firstly, we stress the need for clear communication to students about the introduction of a new structured PhD programme and the forthcoming changes, especially in relation to credits for modules and the nature of the modules themselves. Students stated that involvement in module design (and perhaps setting up an on-line forum) would be useful to them, instead of them merely being ‘end users’ of the modules. Also, students recommended that formal training needs be treated as an interactive process and for modules not to be delivered in a lecture style format. Additionally modules should address changing research trends and evolving graduate studies needs. Similar recommendations were made by postgraduates in Great Britain (Dawson 1994; Gwanzura-Ottemoeller et al. 2005).

Details of the NUIMaynooth Geography PhD programme are outlined in Table 1. During the focus group this existing programme was augmented by the students, who created a PhD programme ‘wishlist’, which is broadly based on the contemporary NUI-Maynooth training model. Participants added components that would further support their development as PhD researchers. Suggested changes included offering some modules earlier in the programme while other modules be expanded to include different phases of the research process. Currently modules have an associated credit weighting [European Credit Transfer and Accumulation System (ECTS)] and are required for progression. We would suggest that this model be extended to also incorporate more informal sessions which contribute to professional and academic development (e.g. viva information in year three). Given the complex nature of ECTS and related time requirements, we recommend that additional consideration be given to optimum ways to increase training while maintaining a concern for timely completion. Overall, formal training programmes for PhD students should recognise students’ autonomy and maintain flexibility in standardised requirements. As with any transition, individuals may have different levels of uptake to the new ways. During the transition, those implementing changes must keep in mind that the student experience is likely to be strongly affected by the supervisor’s position within the transition. Fundamentally these recommendations are merely suggestions from NUI-Maynooth students. Our hope is that these may ease

the transition of other departments but, there is no one-size-fits-all approach to the introduction of formal training for the PhD.

Conclusion

In conclusion this paper provides a situated snapshot of staff and student views on a PhD programme which is transitioning to incorporate more formal taught modules. Our research reflects the differentiated opinions of staff and students about the transition and specifically the resulting changes to PhD training at Maynooth. The tensions between the PhD as a product and the PhD as a process and/or training mechanism may be a transitional issue. With the university's focus being increasingly on broad-based graduate education, individual research project aims may be compromised. GREPs should aid the researcher and complement their specialised individual topic. Current experiences at Maynooth reflect the challenge to maintain a strong focus on the individual project while achieving a broad-based education.

Overall, formal training has been warmly accepted by geography students but, in addition to this, students keenly feel the need for training on specific concrete skills and seek mechanisms in place for them to make the transition from a student to a professional career. On the whole, formalised research training is worthwhile; but at the same time, it is important to maintain individual research project flexibility and safeguard the student's autonomy. The formalisation of graduate training can be further enhanced with added informal sessions which contribute to professional and academic development. This would provide an opportunity to standardise the graduate experience without jeopardising completion rates. Future research will be required to assess whether or not formal research training contributes to success inside and outside the academy and whether it has a positive impact on PhD completion rates.

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