

The Importance of, and Case for, Mandatory Research Supervisor Training in the Collegiate University

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In this paper, I highlight nuances of supervision for research programmes in the University setting, looking at how this affects the supervisee's mental health, academic welfare and career progression. I also look at the realities of the University of Cambridge and make a case for mandatory supervisor training.

1. Introduction

In the university setting, research can be between independent researchers or supervisor-supervisee(s). It is the latter that we would like to study and address in this paper.

The crucial and primary question is: *what makes a good supervisor?*

There have been several surveys and studies on behaviours and characteristics of good supervisors, and literature suggests that good supervisors perform with high levels of sincerity, respect, genuineness, concern and openness [2]. They bring knowledge and experience to the table, and use good teaching practices, goal-setting and appropriate feedback to motivate and work with the supervisee(s). Good supervisors are generally seen to be supportive, and critical only when required and that too in a constructive manner [3]. Effective formative feedback, without any associated summative assessment or judgement, is an essential part of a supervisor's role [4].

At the Graduate Union, we think that every research student should be supported in not only completing their course but also to be mentored to achieve their goals post-

University, in both Academia, the Public sector and the world of business. As the University relies on a system supported by supervisors, all supervision should be good. To achieve this, a supervisor does not have to be an expert in welfare but should be able to signpost, help with personal development, with the department, plan induction and set clear expectations of what a Cambridge Education looks like. Their key contribution is to provide a firm structure so that they can get the best from the faculty for the student, show progress and help give positive feedback.

1.1. Research in the United Kingdom

Research as a form of learning that values the creation, discussion and contestation of knowledge has become central to the teaching and learning experience the world over, even within curricula at the undergraduate level world-wide. Since 2004, there has been an increased focus on UK universities to develop students as researchers, with research centres established in various universities as well as the publication of handbooks on postgraduate and undergraduate research [5-7].

In Universities UK's report on *Higher education research in facts and figures* [8], it highlights how research in UK is excelling: 76% of Research Excellence Framework 2014 submissions were 'rated either world-leading or internationally excellent in quality', the UK's field-weighted citation impact was 1.57 (ranked first out of all G8 countries) and UK research accounted for 10.7% of citations and 15.2% of the world's most highly cited articles. Upon the release of this report, Paul Boyle, Chair of Universities UK's Research Policy Network and Vice-Chancellor of the University of Leicester, said:

"This new publication makes it clear that research from UK universities is internationally leading, changes lives and brings in billions of pounds to the UK economy. To ensure that the UK's research success continues, we must continue to increase investment in research and development, as many of our international competitors are doing."

One of the key aspects of the report was the reported rise in number of research students and how this is leading to an increased academic and research activity in the universities in the UK.

1.2. Research and Postgraduate Students in the University of Cambridge

The University of Cambridge has been at the forefront of this, with 107 affiliates of the University of Cambridge having been awarded the Nobel Prize since 1904. The research community comprises of over 1500 tenured academics, more than 3500 contract research staff and almost 4000 PhD students in over 70 academic faculties

and departments and 140 University research centres and institutes [9].

Students are an important constituent in this landscape, in almost all the 12 strategic research initiatives and 7 strategic research networks. There were 7092 applications made for research degrees in 2017/18 cycle of the University [10] itself. Given these numbers and the responsibility of care of the University to its students, looking closely at their academic welfare and rights is of utmost importance.

Since a research student can only use their conceptual sandbox for research in a timed manner, in a university research degree/course, good supervision is key to getting there. Good supervision leads to the development of skills, values and practices central to learning the rules and role of research.

In the University of Cambridge, the Code of Practice for Research Students and the Code of Practice for Students on the MPhil by Advanced Study and MRes (for students on MPhils with taught elements and MRes programmes) set out the responsibilities and mutual expectations of research students and their supervisors. With sustained campaigning by the University of Cambridge Graduate Union, the Codes of Practice for Research Students now include a page for students and their supervisors to sign to say that they have read and understood the contents, besides a *Research and Resources Overview Form* that shall highlight aspects of research timelines and resources available for a project being included for students coming in from October 2019.

However, more needs to be done for improving aspects of supervision, given our consultation with members of the Union.

This has been reflected in the mental health issues, academic welfare and career progression-related matters. The University has published 'A Handbook for Supervisors of Graduate Students' and has Moodle training for new supervisors. The University has also launched a Postgraduate Feedback and Reporting System, along with a student self-evaluation form system. However, this does not address the aspects of supervision that may be lagging or not as good as would be representative of the high academic and research standards of the Collegiate University.

There have been reported instances of bad supervision affecting the mental health of students. In the recently conducted Graduate Union Mental Health Report, 93% of students who reported that their supervisor has unreasonable expectations also reported mental health problems, while 25% of 1803 respondents report that their relationship with their supervisor has negatively affected their mental health [11]. There have been cases reported to the Students' Unions' Advice Service (SUAS) that highlight the gravity of the problem. In our discussions and consultations with students, issues have ranged from low frequency of meetings and research interactions, lack of clear expectations and boundaries in the project, lack of understanding and/or addressing disabilities (both visible and hidden), lack of advice on publications and career-related matters, and 'feeling lost and unsupported' during various phases of the research project.

Another key aspect in this large discussion that has been a point of debate and discussion is that of pastoral care and support in the departments. Even though

the Collegiate University delegates most of the responsibility for the same to colleges, who allocate a Graduate Tutor to the student. However, in the instances when the student is not as active and close to their colleges as to their departments and faculties, this can be a problem. The Graduate Union has been working with the University to improve departmental welfare provisions and support, with a recent Union motion and the Department of Physics having accepted the suggestion of a staff-member trained for welfare signposting. Hopefully this is the first of other departments taking steps in this direction.

However, since research students have maximum interaction with their supervisors, it is pertinent for the supervisors to be able to gauge and intervene when welfare-related issues arise in their supervisee(s). In the recent Graduate Union Mental Health report, 80% of students reporting that their supervisor does not provide welfare support or signpost to support services also reported mental health problems [11]. Be it hidden or visible disabilities, finances or mental health, among others, I feel that the supervisor should be equipped with the know-how to help the student, in signposting at the very least. This is, in no way, an attempt to replace the collegiate model of pastoral care and support, but rather a way to supplement it, with the primary onus and responsibility remaining with Graduate Tutors in colleges. Cambridge is a highly competitive environment, where many have faced anxiety and even impostor syndrome (68% reported impostor syndrome affecting their mental health, in the Graduate Union Mental Health Report 2019), and every

provision of support can only be a step in the right direction.

1.2.1. What could good supervision and best practices for research degrees at Cambridge look like?

Our aim in the Graduate Union campaign 'Graduate Rights' and through this paper is to stand up for good supervision. We believe that every research student must be supported in completing their course of the student. As the entire education and research system for the student is intricately linked and reliant on supervision, we think this should be good. There has been a significant amount of work done on looking at the nuances of good supervision in the recent past [12-15].

At application, because most departments expect a supervisor to be named, there needs to be a clear role description of the supervisor, and how this description fits within the department that the student has applied to. At those initial phases, it is helpful for the student if their supervisor is able to signpost on funding, help with pre-induction preparation (to feel welcome and help in aspects such as the reduction of culture shock if students come from countries that are culturally different from the United Kingdom), and establish boundaries and expectations for the project and course [16-18].

Departmental oversight, with clear responsibilities as highlighted in the Code of Practice, which effectively acts as a basis to develop an understanding, can help to fulfil the need for setting clear expectations. The application process itself should be fair, such that there should be equal access to information about the various nuances of the project (such as conception of project, background of

supervisor-supervisee and timeline). This is important also to reduce the chance of a power imbalance that may be established early on, without these expectations and aspects of the project clearly defined. This is where the recent Research and Resources Overview Form, which I proposed, can be very helpful. However, the active reinforcement of these ideas must be done by the supervisors and departments. The role of the advisor is of utmost importance in this as well, to safeguard the interests and needs of the student.

While students need a good induction and training to take advantage of a supervisor, it is also pertinent that the supervisors are aware and actively working towards fulfilling these disparate needs of a student. They should be able to support in a timely manner before and throughout the project, and act as mentors [19, 20]. They should be able to help with professional development, student learning and positive feedback, so that the research and course is meaningful to the student beyond the course itself, in their respective careers [21-24]. Even if the student were to not go into research later, skills and values in a successful project can be helpful in myriad other fields and in life, in general.

Departments could also look at setting up peer-to-peer programmes as well as giving junior researchers a chance to grow. This could be through specific research collaborations with senior staff and external collaborators, training modules and workshops, and research symposia and conferences. Once the research students are settled, one must review expectations and attainments. At this time supervisors should look at auditing the skills of their supervisees, not only with the annual

formal reports but with more regular progress logs.

We also believe that there should be ways for the supervisees to feedback on the nature and kind of supervision provided, either by informal ways such as discussions with their graduate tutors and Directors of Studies, or more formal systems such as a centralized or department-based supervision feedback system. Besides this, a more definite research plan, possibly alongside a *Personal Development Programme*, must be developed.

So, to summarise, good supervision will involve the department in setting expectations at the application-stage and during the project, a good structure pre-induction and induction phases and regular feedback on supervision and other aspects of the research projects. On the mentorship front, the skills and know-how of the research student must be audited regularly, particularly keeping in mind the goals set for the project and the research timeline (which should also be regularly reviewed and changed by mutual consensus if need be).

Personal development within and beyond the project is crucial and therefore training modules and workshops must be attended by the student, and for this the supervisor should also encourage the student actively. The awareness of when and how to intervene to either enact these suggestions or help the student a certain way is an important nuance of a supervisor's duty. We believe that this can be better done with supervisor training. Before making a case for mandatory supervisor training, we would like to highlight some of the case-studies of how the kind of supervision provided has affected the academic

welfare, mental health and general wellbeing of students in the Collegiate University.

1.3. Case Studies

In December 2018, the University of Cambridge Graduate Union ran a student consultation on academic welfare and supervision. We had a response from several students, which helped us understand the realities and difficulties faced by students.

For starters, the expectations of students and supervisors with respect to amount of time and nature of supervision provided has been a point of contention, as shown by a testimony (that was given consent of sharing) of a postgraduate student:

A post-doc in the lab acts as my supervisor or I'm assigned to that fresh graduate who is not an expert in my field. Since I'm self-funded I don't get any advice or suggestions from my actual supervisor, but he expects me to do his project as my PhD. I don't think this is fair. I don't know who to raise this issue to. I don't have an advisor and my college tutor is practically useless.

There are various other aspects that are covered in this second testimony by a responder:

My current supervisor seems to be quite inexperienced - redirecting my study, not responding to my emails, and seems very disorganised (forgets about what we agreed on our meetings; makes excuses about being busy with applying for grants or supporting other students). I understand that I may be one the first PhD students of my current supervisor so she may not have enough experience in supervising. At the same time, I have found my advisor not being there for me either, being busy when I needed answers since my supervisor was not responding.

Notwithstanding this, we have also had reports of excellent supervisors and good supervision practices.

We have also been having discussions with the Students' Unions' Advice Service (SUAS), and they have informed us about instances and problems faced by graduate students in the University [26-28]. For instance, in Case Study 3 of the SUAS Annual Report 2013-2014, we read about the case:

A PhD student drops in to discuss a breakdown in her relationship with her supervisor. She says that her supervisor has been giving her less feedback and is often unavailable to meet to discuss drafts of her writing. The graduate student has said that she had been registered formally for the PhD, this year being her second year.

One hears of a similar complaint in Case Study 1 of the SUAS Annual Report 2014-2015:

A PhD student has made an appointment with the Student Advice Service to talk about a breakdown in his relationship with his supervisor. He says that the supervisor has been consistently rude and unsupportive throughout the year, to the point whereby the student is considering dropping out of their PhD -the department has offered the student the option of converting their work into a Master's. The student is likely to take the offer but wants to make a complaint about the Supervisor and their behaviour.

There have been such instances as recently as the ones highlighted in the Annual Report 2017-2018. It is clear from these case studies and testimonies that there is more than needs to be done in terms of supervisor training and ways to promote good supervision in the Collegiate University.

Table 1: SUAS Data on Cases regarding 'Supervisor Issues'		
Period	Numbers	
	Primary Cases	Secondary Cases
11 th June 2016-30 th June 2017	19 (16 <i>P</i> , 2 <i>M</i> , 1 Unknown)	3 (All <i>P</i>)
1 st July 2017-30 th June 2018	19 (16 <i>P</i> , 3 <i>M</i>)	9 (6 <i>P</i> , 3 <i>M</i>)
1 st July 2018-30 th June 2019	23 (22 <i>P</i> , 1 <i>M</i>)	7 (4 <i>P</i> , 3 <i>M</i>)
<i>P</i> – PhD Students, <i>M</i> – Masters Students		

Table 2: SUAS Data on Cases regarding 'Changing Supervisors'		
Period	Numbers	
	Primary Cases	Secondary Cases
11 th June 2016-30 th June 2017	1 (All <i>P</i>)	1 (All <i>P</i>)
1 st July 2017-30 th June 2018	No data available	No data available
1 st July 2018-30 th June 2019	1 (All <i>P</i>)	-
<i>P</i> – PhD Students, <i>M</i> – Masters Students		

Table 3: SUAS Data on Cases regarding 'Complaint University' related to supervisors		
Period	Numbers	
	Primary Cases	Secondary Cases
11 th June 2016-30 th June 2017	1 (All <i>M</i>)	
1 st July 2017-30 th June 2018	7 (5 <i>P</i> , 2 <i>M</i>)	
1 st July 2018-30 th June 2019	3 (All <i>P</i>)	
<i>P</i> – PhD Students, <i>M</i> – Masters Students		

From 11th June 2016 until 30th June 2019, there have been several cases where postgraduate students have raised 'supervisor issues' with the SUAS, as can be seen in *Table 1*, *Table 2* and *Table 3*. We would like to thank SUAS for providing us with this information. Please note that

'Primary Cases' for a certain issue means that the students came with this issue as the primary issue to be discussed while for 'Secondary Cases', it emerged during the discussions but was not necessarily the primary issue of discussion.

2. The Case for Mandatory Supervisor Training

The importance of research supervisor training cannot be understated. In this section, I would like to focus on the case for mandatory supervisor training using three primary bases: duty of care, quality control, and general research environment.

2.1. Case based on Duty of Care

A university has a general duty of care, which is to deliver its educational and pastoral services to certain standards of ordinarily competent institution, and, in carrying out its functions and services, to act reasonably to protect the welfare and wellbeing of its students.

Though the University of Cambridge does provide more than the minimum of a basic welfare service to students with an effective triage system to identify cases that it can deal with and those it needs to refer to external specialists, the University must do everything reasonably practicable to ensure the health and safety of its students. There is risk that the University can be taken to the sector ombudsman - the Office of the Independent Adjudicator for Higher Education (the OIA) if it fails to meet its duty to its students with claims in negligence as well as internal complaints and referrals.

This includes mental health and as has been highlighted in the previous section, a lack of awareness of welfare signposting on the

part of the supervisors can have an adverse effect on the supervisee(s).

Under the same Act, a university needs to ensure that it has in place robust and effective policies, systems and procedures for supporting students, and that adequate training and awareness-raising is provided for staff, in this regard. This is a necessity for all students to whom the University has a duty of care.

Given the number of cases of bad supervision and academic welfare-related issues affecting the mental health and general wellbeing of postgraduate research students, the Collegiate University runs the risk of potential negative publicity and feedback from cases that may be worse in the course of time.

2.2. Case based on Quality Control

The research world is a highly competitive world. Students who are training to be researchers, in postgraduate research courses, usually seek to be equipped with the tools, training, values and methods to be at the forefront of research in their respective fields. Keeping this in mind, the nature of research supervision directly impacts the development of the students in this domain.

In the UK, several universities have taken a step in the direction of mandatory supervisor training. An online '*Introduction to research supervision*' course is mandatory for all members of academic staff wishing to be appointed as research supervisors at University College, London. Imperial College – London requires all new supervisors to complete a mandatory course called '*Introduction to PhD supervision*'. There are various other universities, such as Birmingham,

Nottingham, York and Strathclyde that have developed interactive and innovative ways to promote supervisor training.

Given the stiff competition from some of these universities in terms of quality control in postgraduate research courses, if the University of Cambridge does not look at ways to put in place something that can assure quality for money in the courses, it may not be long before this could have negative ramifications on the kind and numbers of students applying and joining for research degree courses.

Irrespective of the competition, I believe that Cambridge University has a certain commitment to its historical legacy and high academic and research standards, and in line with this understanding, it is crucial to maintain these standards in research and education. It is important to keep this in mind, in the context of the University nurturing and producing leading next-generation researchers for the world. I believe mandatory supervisor training will go a long way in reinforcing that commitment.

2.3. General Research Environment

The welfare and wellbeing of researchers and students is key to maintaining a healthy research environment in the University. Be it collaborators, funders or external bodies, the lack of training or good supervision could have a ripple effect on these disparate stakeholders. There are often research collaborations between departmental groups and industries, which may be jeopardized if the progress and wellbeing of the concerned students is not considered and prioritized. While the University may largely have maintained this through dedicated and sincere staff, there is always the one-off case where this isn't

the case. Not only does this have a reputational risk, but at a more practical, operational level, it may affect the dynamics and elements of research in the Collegiate University.

3. What is the GU Council Policy on Good Supervisions?

It is with pleasure that I would like to report that I proposed a motion on good supervision, seconded by Mr. Alessandro Ceccarelli, and this was unanimously adopted by the Council as a GU policy. The content of the paper is as follows:

The Graduate Union notes:

- 1. Since 2004, there has been an increased focus on UK universities to develop students as researchers, with research centres established in various universities as well as the publication of handbooks on postgraduate and undergraduate research;*
- 2. In Universities UK's report on Higher education research in facts and figures 2018, it highlights how research in UK is excelling: 76% of Research Excellence Framework 2014 submissions were 'rated either world-leading or internationally excellent in quality', the UK's field-weighted citation impact was 1.57 (ranked first out of all G8 countries) and UK research accounted for 10.7% of citations and 15.2% of the world's most highly cited articles;*
- 3. The research community in the University of Cambridge comprises of over 1500 tenured academics, more than 3500 contract research staff and almost 4000 PhD students in over 70 academic faculties and departments and 140 University research centres and institutes;*

4. *Students are an important constituent in this landscape, in almost all the 12 strategic research initiatives and 7 strategic research networks;*
 5. *There were 7092 applications made for the research degrees in 2017/18 cycle of the University itself;*
 6. *There have been reported instances of bad supervision affecting the mental health of students. In the recently conducted Graduate Union Mental Health Report, 93% of students who reported that their supervisor has unreasonable expectations also reported mental health problems, while 25% of 1803 respondents report that their relationship with their supervisor has negatively affected their mental health. There have been cases reported to the Students' Unions' Advice Service (SUAS) that highlight the gravity of the problem;*
 7. *In our discussions and consultations with students, issues have ranged from low frequency of meetings and research interactions, lack of clear expectations and boundaries in the project, lack of understanding and/or addressing disabilities (both visible and hidden), lack of advice on publications and career-related matters, and 'feeling lost and unsupported' during various phases of the research project;*
 8. *In the instances when the student is not as active and close to their colleges as to their departments and faculties, the presence of welfare support in colleges and not enough welfare signposting know-how of the supervisors in departments could be detrimental to the wellbeing of the students.*
1. *We believe that every research student must be supported in successfully completing their course of the student. As the entire education and research system for the student is intricately linked and reliant on supervision, we think this should be good;*
 2. *While students need a good induction and training to take advantage of a supervisor, it is also pertinent that the supervisors are aware and actively working towards fulfilling these disparate needs of a student. They should be able to support in a timely manner before and throughout the project, and act as mentors;*
 3. *Supervisors should be able to help with professional development, student learning and positive feedback, so that the research and course is meaningful to the student beyond the course itself, in their respective careers;*
 4. *We also believe that there should be ways for the supervisees to feedback on the nature and kind of supervision provided, either by informal ways such as discussions with their graduate tutors and Directors of Studies, or more formal systems such as a centralized or department-based supervision feedback system;*
 5. *Personal development within and beyond the project is crucial and therefore training modules and workshops must be attended by the student, and for this the supervisor should also encourage the student actively;*
 6. *The awareness of when and how to intervene to either enact these suggestions or help the student a certain way is an important nuance of a supervisor's duty. We believe that this*

The Graduate Union believes:

can be better done with supervisor training.

- 7. The possibility of mandatory supervisor training must be seriously considered in the University for the academic welfare of students.*

The Graduate Union resolves:

- 1. To lobby for a comprehensive training programme for all research supervisors in the University of Cambridge;*
- 2. To work with the University and departments to promote supervision training in the Collegiate University;*
- 3. To launch a campaign that shall look at student consultation on supervision and work towards regulated and possibly compulsory supervisor training in the University.*
- 4. The Graduate Union shall run a signature campaign/petition among members for lobbying for mandatory training in the University for supervisors of research postgraduate students.*

4. What are we campaigning for?

We are campaigning for good supervision and making supervisor training mandatory for all members of academic staff wishing to be appointed as research supervisors at Cambridge, including new members of academic staff who may have had experience of research supervision elsewhere. We envision this introductory online course developed by the Education Services, in collaboration with Cambridge Centre for Training and Learning (CCTL), Graduate Union, Heads of Departments, Faculties and Schools, and the Researcher Development Programme (RDP). The focus of the course will be on building positive working relationships between research students and supervisors. It can be an hour-

long course, on completion of which, the supervisor will be able to download a certificate of completion, and be eligible to join a face-to-face session, 'Developing as a Cambridge Supervisor', if they so wish to.

Experienced Cambridge supervisors are also encouraged to work through the course as a refresher-course and a central resource containing information, guidance and links to relevant materials and policies. We would like this to be followed up by processes for reflective practices and fora for discussing within and among departments, to improve supervision, potentially as a 'Supervision Practices Ford'.

The policy also notes that the Union believes that *'there should be ways for the supervisees to feedback on the nature and kind of supervision provided, either by informal ways such as discussions with their graduate tutors and Directors of Studies, or more formal systems such as a centralized or department-based supervision feedback system'*. This is a general principle we support and stand by and are happy to note the recent work on our suggestions for anonymous feedback on supervisors. We will be supportive of any policies or steps taken in this direction.

Discussion

Supervision is key to a good research project outcome, not just in the award of the degree but in terms of substantive positive impact on career progression of the students. I have highlighted in this paper how the negative impact that the lack of the same could have. The important point here is to note that what we seek is a mandatory (possibly online) basic supervisor training that can be supplemented by existing workshops, modules and resources.

However, the investment of an hour into the development of the key skills needed to be a good supervisor could help reduce the hours of frustration, anxiety and other negative effects that students face in the work environment due to the lack of supervisor training. This should not be difficult to create, since the Moodle resources exist but it is in the mandatory nature of this proposal that the key shift in policy is proposed.

The Graduate Union, along with the Education Services, Cambridge Centre for Teaching and Learning (CCTL), Education Quality and Policy Office (EQPO) and Cambridge University Students' Union (CUSU), could help with the development of this key resource, and help in facilitating this important step.

4. Conclusion

In this paper, I have highlighted the key aspects and characteristics of good research supervision. I have gone on to describe the negative impact on students' lives due to lack of good supervision in certain instances and cases. I have then put forth a three-pronged case for mandatory research supervisor training, and ended by suggesting nuances of how this could be done practically.

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