Introduction

This paper identifies future approaches to supporting and supervising postgraduate research (PGR) students, drawing on practices developed during the COVID-19 pandemic. It provides examples of the steps taken by providers to maintain quality and standards in adverse circumstances, and to build the types of resilience that will help research degree communities shape their future practices. The paper is designed to be read alongside advice on doctoral academic standards published by QAA in March 2021. It is structured under three main headings: supervision, student wellbeing and support, and assessment and the viva process. The final section highlights future approaches, based on lessons learned during the pandemic.

The content of this paper was informed by forums which were held with a number of providers from across the UK. We have anonymised their specific responses but a full list of those who took part in the forums can be found at the end of this document.

From our conversations with providers who have different student profiles and numbers, it is clear that well-planned mitigations were put in place to support both PGR students and supervisors. As with other aspects of their delivery, higher education providers have had to adapt quickly and responsively to the needs of PGR students. While recognising that no single solution will be suitable for all providers, this paper offers an indication of the practices that have supported robust student outcomes during the pandemic.
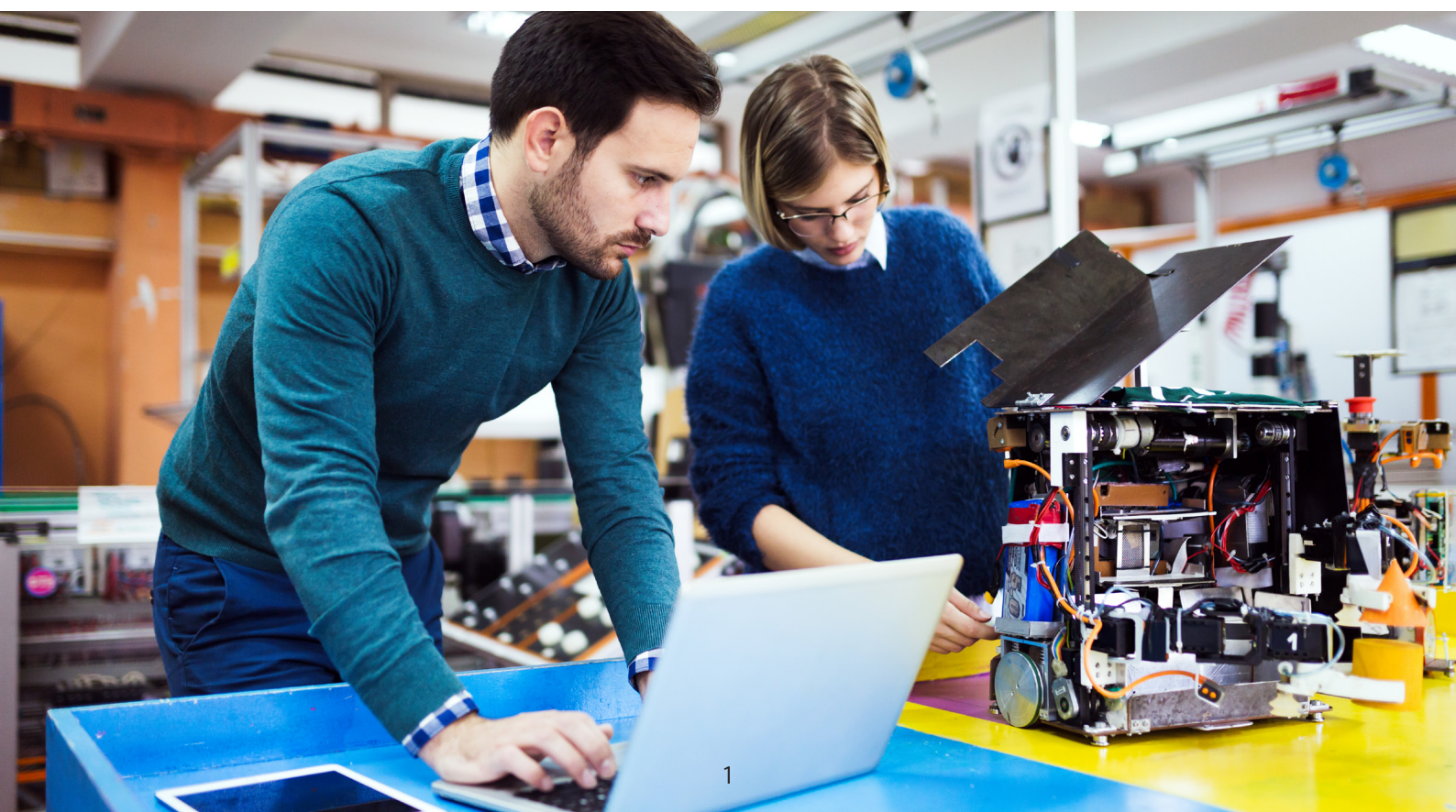
Supervision

? How has the pandemic affected PGR supervision?

Overall, supervision has been able to continue during the pandemic, employing the same technologies and techniques used to effect the transition from in-person to online interaction in taught provision. Providers with substantial overseas postgraduate research student numbers, or with experience of geographically-distributed, multi-campus provision were particularly well placed to make this transition as they were already practised in remote/virtual PhD supervision and its attendant technologies.

Supervisory workloads were a factor in the transition to virtual supervision and in its subsequent management. Those PGR supervisors who also teach on undergraduate and postgraduate taught programmes found themselves having to adapt both their teaching and supervisory practices to the virtual environment at the same time, which added to their overall workload. Unsurprisingly, the transition was somewhat easier for providers working to low supervisory loads before the pandemic.

Although they may work in teams in some laboratory-based subjects, many PGR students do not enjoy the comfort of 'cohorts' and their relationship with their supervisor is, therefore, of particular importance. The pandemic has caused an upsurge in student anxiety and has added a substantial pastoral dimension to the traditional role of supervisors. Some supervisors are empathetic and regard an element of pastoral care as part of their role, but this is not true in all cases. Surveys conducted at one provider indicated considerable variability in the relationship between supervisors and supervisees, and there is a general perception among providers that the pandemic has brought to light issues in supervision that might otherwise have gone unnoticed.

? How were communications and connectedness maintained during the pandemic?

All providers recognised that supervisors had a vital role to play in maintaining communications with students during the pandemic, and took steps to ensure that communication streams were established and used. In many cases, the frequency of virtual supervisions was increased and, in some cases, they were monitored to ensure they were taking place. There is a general perception that moving supervision online has led to a more managed, coherent and equitable supervisory system, and therefore to a more consistent experience for research students.

There is concern among providers that remote supervision can work well with students who are performing well, but that it may be more challenging for supervisors alone to spot early signs of underperformance or to provide support at a distance for students struggling with progression. In acknowledgement of the complex and individual nature of the challenges PGR students typically experience, which have been exacerbated by COVID-19, some providers have established case review panels. These panels draw on and bring together supervisory teams, university and school/faculty directors of research and specialist support staff to create a holistic approach to dealing with the difficulties students are encountering in their academic and personal lives. The pandemic has reinforced the value of having greater internal connection between academic and support services, as well as between individual students and supervisors.

? What record keeping has been used by PGR students during COVID-19?

Almost all providers we spoke to advised students to keep a COVID-19 record of the challenges caused by the pandemic, and the adjustments to their research project that were needed to mitigate their impact. There was relatively little consensus about how the COVID-19 records would be used. While some providers see the main value of the COVID-19 record as a means of focusing discussions with supervisors, others see it as having formal value for institutional record-keeping and oversight. One university, for example, requires students to keep records because they help it to make informed, equitable and consistent decisions about extensions, intermissions and support. Others have incorporated COVID-19 records into their annual review and progression processes.

There is similar diversity in relation to assessment. Some providers expect an account of the impact of the pandemic to be given within the body of the thesis itself, typically in the methodology section, rather than as a separate record or additional statement submitted alongside it. Others take the view that students do not necessarily want their thesis to reference the COVID-19 legacy and would prefer to submit a separate record that can be 'detached' from it. In some cases, the COVID-19 record is sent with the thesis to the examiners.

There is greater consensus regarding the longer-term value of keeping a COVID-19 record. This was typically viewed as a way of providing a detailed account of the impact of the pandemic on students' research projects, which might be needed for future requests for extensions or funding bids. Providers observed that it is entirely possible that some of the impacts of COVID-19 may not reveal themselves until later, so it is important to keep updating COVID-19 records. They further pointed out that, without a written record, students might forget the detail of the adjustments they had made.

? Have lessons learned during COVID-19 impacted on supervisor training?

Providers offered briefing sessions and materials for supervisors about pressing issues related to COVID-19, such as remote supervision and signposting to sources of support for PGR students. As mentioned earlier, there is a general perception that the pandemic has tested existing supervisory practices and added a substantial element of pastoral care to supervisors' duties. Faced with the challenges thrown up by the pandemic, providers report that some supervisors have recognised that, despite years of experience, they may not have a full understanding of the contemporary PGR student journey.

In some cases, this may be due to variation in providers' policies on supervisory training. Typically, initial supervisory training is compulsory for staff wishing to supervise PhDs but annual updates are often deemed to be part of continuing professional development which supervisors are encouraged, but not required, to complete. However, as a result of the pandemic, the view that there should be a minimum set of expectations and standards in respect of doctoral supervision, including compulsory periodic updating, appears to be gaining ground.

While initial training responses to the pandemic were necessarily reactive, many providers are taking proactive steps to identify the skills gaps that surfaced during the pandemic and build them into revised and enhanced supervisory training. These skills include intercultural awareness (for those dealing with international students), the need to be more empathetic, visible and accessible than previously to PGR students, and to be on the lookout for signs of stress and changes in behaviour that could indicate isolation, or mental health and wellbeing issues. In this regard, some institutions provide supervisors with the opportunity to take mental health first aid courses.

In addition to developing their personal skills in these areas, supervisors also need to be aware of the changes in the digital infrastructure that may have occurred as a result of academic and professional services moving support, training and community resources for students online during the pandemic. Providers have taken steps to ensure that additional resources are clearly signposted, and supervisors need to be able to help by pointing students towards them.

Student wellbeing and support

❓ How were students supported during the pandemic?

At the outset of the first lockdown, it was thought that the greatest impact of the pandemic would be on students in the final year/stage of study. But with the benefit of hindsight, those writing up their thesis in 2020 were less impacted than those in the middle of their research and, as the pandemic continued, providers became increasingly aware of the extremely difficult circumstances in which many students were attempting to continue their research.

Many cases involved highly individual and complex combinations of factors such as a lack of study space, the inability to access specialist equipment or conduct field work, underpowered computers (which many providers were able to replace), caring responsibilities, bereavement, financial difficulties, and general uncertainty and isolation exacerbated by the lack of contact with peers. These and other factors were leading to unprecedentedly high levels of stress among PGR students for which there were neither 'quick fixes' nor 'one-size-fits-all' solutions.

Providers found that students were appreciative of their concerns being listened to. Some set up regular drop-in sessions where students could ask questions, and staff could seek to outline the options available and reassure them that other students were in the same position, globally as well as nationally, and that everything that could be done on their behalf was being done. For funded third-year students, the likelihood of receiving funded extensions was a major source of anxiety in the early months of the pandemic, and this remained a concern for funded second-year students throughout the following months. Students and their supervisors had shared concerns about the likelihood of being able to attend national and particularly international conferences, and of the likely risks and costs involved.

Impact on Stage 1 students

Because of lessons learned from the impacts and restrictions imposed by the pandemic in the previous six months, October 2020 PhD starters were generally encouraged to undertake a risk assessment of the likely resilience of their research proposals in the event of further lockdowns and travel restrictions, and how the risks identified might be mitigated. Some providers encouraged their students to develop a 'Plan B' anticipating possible adjustments proactively. Providers were unable to apply the same risk assessment to all students because the nature of the risk varied according to the type of doctoral qualification being prepared and the degree of flexibility of research design. For students undertaking practice-based research and fieldwork or, for example, professional doctorates, the availability of the research context is critical, and while it may have been possible for students to mitigate lockdown restrictions by rescheduling their research and doing things differently and in a different order, this could not continue indefinitely.

For this reason, many institutions asked October 2020 starters to risk assess their proposed research and confirm its continuing viability. This advised consideration of options included deferrals, as well as home-based and campus-based starts.

Stage 1 students were able to undertake online variants of standard introductory activities covering welcome, induction, and researcher training and development. Larger providers had already transferred substantial parts of these activities online before the pandemic, and smaller providers quickly followed suit. Providers supplemented recorded materials with live online events such as 'Town Hall' meetings involving supervisors and professional services staff, and question and answer sessions. Overall, providers reported good levels of engagement with new PhD students, but some were concerned that while all stages were affected by the pandemic, the first stage group was the only one that had never met face-to-face, either within broad subject groupings or with PhD peers across the university.

Impact on Stage 2 and Stage 3 students

Stage 2 students experienced the greatest need to adjust their projects because they had already embarked on them and were in the data collection or literature survey phase of their research when the first lockdown was announced.

Most providers have taken the view that supervisory teams understand the research area and consist of specialists who can take decisions with the student to make immediate adjustment to projects without requiring additional approval. Adjustments were recorded in logs, or in supervision records, and monitored later in COVID-19 meetings or in standard annual progress reviews.

There were relatively few cases where adjustments have not been possible, and they typically involved travel and fieldwork. Because of their reliance on financial support, funded students were less likely to suspend their studies than unfunded students.

Depending on their area of research, PGR students have traditionally welcomed the opportunity to gain a teaching qualification and some experience of teaching students in Stage 2 and/or Stage 3 of their PhD studies. This opportunity has been unaffected and, if anything, extended during the pandemic when the demand for Graduate Teaching Assistants (GTAs) actually increased. This occurred partly because group size was smaller for online than in-person tuition, leading to increased demand for tutors, and partly because GTAs helped to create the materials required to effect the pivot to online learning and teaching. Some PGR students referenced these activities in their application for extensions. Following UKRI's decision to offer funded extensions to third and, subsequently, second-year students, almost all providers experienced a very substantial increase in the number of applications for extensions received during the pandemic. These were mainly from funded students, and less frequently from self-funding students. Some providers offered fee waivers to students who did not receive funded extensions.
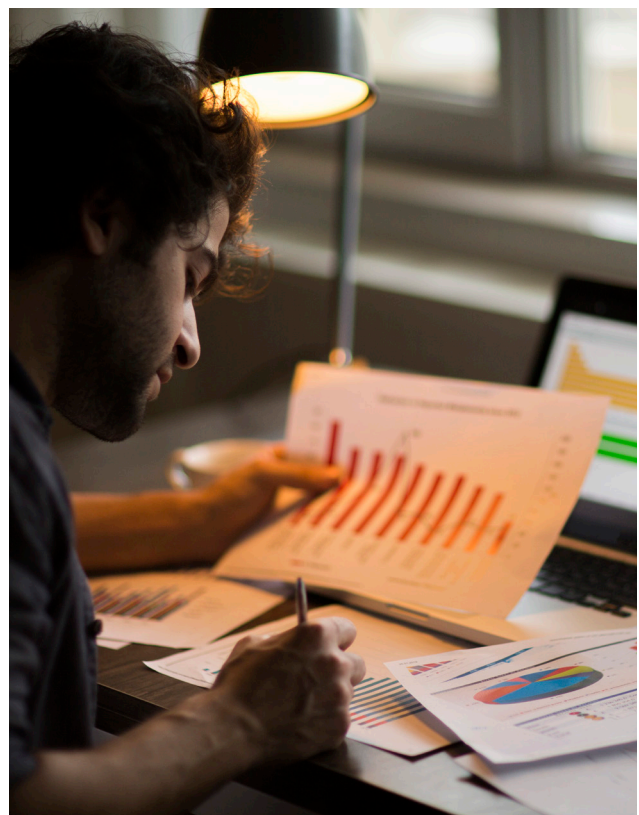
Assessment and the viva process

? How have assessment and the viva process been affected by COVID-19?

Prior to the pandemic, a small minority of providers used online vivas, mainly for students studying online and/or living overseas. In most universities it was a regulatory requirement that vivas were face-to-face, with online vivas being reserved for exceptional circumstances. One large provider observed that, prior to the pandemic, staff were uncertain whether online vivas were even possible, only to find that within two weeks of lockdown the whole university had moved to them without difficulty. Others described how staff had spent the first week of lockdown writing emergency guidance and regulations for online vivas which are now being updated in the light of experience.

Early guidance about using the new medium was designed to anticipate potential barriers to communication that might cause stress and confusion for students immediately before or during the viva itself. This included advising students ahead of the viva that it would be recorded. If they did not already have them, a number of providers introduced an independent chair to help manage the virtual environment by checking for signs of fatigue and ensuring regular breaks were provided. Students with poor internet connections at home were able to request the use of a COVID-19 'safe space' on campus for the duration of the viva.

Providers are aware that further work is required to frame guidance that deals with issues such as disability support, particularly in respect of vision and hearing, and with the setting in which candidates take the viva. The traditional on-campus setting marks a degree of formality that may be difficult to reproduce in the home environment, and the dependence on technology can increase anxiety. When a viva takes place on campus, supervisors and professional services staff are available to support candidates who are distressed by an adverse outcome. Ideally, therefore, candidates experiencing an online viva need to be in a setting where they have access to support and services post-outcome. In the meantime, in cases where a negative outcome is possible, universities are encouraging candidates to have someone available locally and ensuring that supervisors are available to speak to them as soon as the outcome is known.

Providers reported that both students and staff appear content with online vivas. In response to apprehension on the part of some students, providers continued to offer the alternative of deferring assessment until in-person vivas were possible again, but most candidates preferred to be assessed during the pandemic. Feedback from students has generally been very positive about support for online assessment processes.

Providers are also confident that online vivas have been successful, to the extent that most see no likelihood of a return to in-person only vivas. The advantages of online vivas include the ability to use examiners from around the world, without concerns about the practicalities of travel, cost and right to work. Providers whose students are distributed globally also see clear advantages in online vivas.

The outcomes of online vivas conducted during the pandemic appear to be similar to those conducted in pre-pandemic times. One provider compared the outcomes of vivas taking place between March 2020 and January 2021 with those of the three previous years and found no significant difference. Other providers take the view that this was to be expected, as the vivas conducted during the pandemic involved the students least affected by it.

? Has the academic standard of awarded PhDs been affected by COVID-19?

Providers recognise that some PhDs completed during the pandemic will contain less data than in pre-pandemic times. This can take many different forms, including fewer experiments completed, fewer locations visited or fewer focus groups held than originally planned. But students demonstrate doctoral attributes by the use they make of the available data and that is the main criterion by which their work should be judged. Examiners will still be able to see the difference between a thesis impacted by COVID-19 and a weak thesis.

Some providers have produced guidance for supervisors, examiners and students about the requirements for a doctoral thesis as outlined in the QAA advice on doctoral standards. This reiterates that a research degree-awarding body's first concern is for the standard of doctoral outcomes which, as the descriptor for doctoral qualifications specifies, does not require that students should have already published their research but rather that their research should be of a quality to 'merit publication'.

A number of providers observe that research rarely follows a linear path, and that students have developed some extremely imaginative and creative responses to the pandemic that have demonstrated great resilience, as well as the ability to adapt to unforeseen circumstances.

Providers were content that the steps they had taken so far to maintain the quality of the research student experience had enabled students to achieve doctoral standards in their outputs, even if their project had been subject to substantial adjustment because of COVID-19.

Future approaches

The providers in our survey all felt that the pandemic had tested the resilience of their supervisory practices and given rise to a number of modifications. In the early days of the pandemic, these modifications had to be operationalised quickly as a reactive response to a challenging and constantly changing situation. Subsequently, providers have taken time to refine their approaches based on experience and lessons learned. This final section identifies the modifications to previous practice that providers found useful and are now retaining and embedding proactively in their future postgraduate research student policies. Although these practices were developed in response to COVID-19, they have relevance beyond the pandemic.

Supervision

Advise students to keep a record that logs the adjustments to their research projects necessitated by the pandemic, or by other challenges they may face. Ensure supervisors discuss this record with their supervisees, and that it is kept updated. Where records of adjustment are not used, ensure that records of supervisions include the basis for agreed adjustments.

Encourage students to include their record of adjustments in applications for extensions and funding, to support equitable and consistent institutional decision-making.

Ensure that supervisions are taking place at the agreed frequency, and that supervisors are appropriately trained to recognise signs of stress and mental health issues on the part of their supervisees, and to deliver pastoral as well as academic support, where needed.

Consider establishing casework review groups, or similar, to which supervisors can refer cases of concern. Such groups are nimbler than once or twice-yearly progression boards and, by including professional and academic services experts, are equipped to undertake early intervention in complex cases.

Reinforce institutional oversight of research degrees and of the wellbeing of research degree students through regular meetings of research degree managers at school, faculty and institutional level.

Review initial and refresher supervisory training to ensure that supervisors, particularly experienced supervisors, are conversant with new and emerging practices, such as online support infrastructure, and with their enhanced pastoral role in relation to student wellbeing.

Student support

Move induction, support and wellbeing strategies, including provisions for resilience and mental health, online as early as possible and make every effort to ensure that they occupy a community space that is used effectively and affectively to support students working from home.

Listen regularly to the concerns of PGR students, using 'drop-ins' and 'pulse surveys' – mini-surveys taken periodically throughout the year that 'take the pulse' of the PGR student population but trigger responses much earlier than traditional end-of-year surveys.

Maximise communication between students and supervisors, using dedicated administrative support such as a PGR Communications Officer where possible, to ensure that all parties are kept abreast of developments and provided with appropriate signposting to forms of support.

Consider holding 'work in progress' sessions at which PGR students present and discuss their work prior to meeting socially in breakout rooms.

Consider encouraging students to produce a digital newsletter for the PGR community.

Review policies and processes on a regular basis, questioning assertions such as 'this is how it has always been done'.

Acknowledgements

QAA has produced a <u>series of guidance, advice and support</u> to help providers and students in the pandemic. We produce this with and for our members.