





# Executive Summary

Students from non-research intensive (NRI) institutions for their undergraduate (UG) degree are struggling to access postgraduate (PG) study at research intensive (RI) institutions within the UK, irrespective of the grades they achieve. For those that do transition into RI institutions, they find this transition particularly challenging, with preliminary evaluation from the Martingale Foundation showing that they are more likely to consider dropping out.

In August 2024, the Martingale Foundation and Public First brought together top researchers and policy specialists in the area of access to postgraduate study for a roundtable discussion on the challenges of transitioning from a NRI institution at UG to a RI institution for PG study or research, primarily in the UK. This report is a culmination of the rich discussion during the roundtable, the foundation of which was the challenge of supporting students with an NRI background to access PG degrees.

This challenge can be summarised in five interlinking steps: due to the undermatching phenomenon, and students increasingly choosing to stay closer to home for UG study, there are students who have the academic attainment to study at an RI institution but have instead decided to study at an NRI institution at UG level. This limits the options of these students who may be capable of PG study and a research career because PG degrees, particularly PhD programmes, are pooled at RI institutions. There is increasing evidence that those who studied at NRI institutions at UG level struggle to access and succeed in PG study and research at RI institutions, where most PG programmes are based. This is likely not due to a lack of academic ability at school-level, as evidenced by the extent of undermatching in the UK, but it is likely that, because of the differing pedagogies and academic content at NRI institutions compared to RI institutions, those from NRI institutions do not have the appropriate foundational knowledge prior to starting a PG degree at a RI institution.

Five key themes were identified from the roundtable discussion: transparency in admissions, gaps in knowledge, the polarisation of research degrees, lack of belonging, and supervisor relationships. These themes cover both access to and success in research-intensive postgraduate courses, as a detailed examination of both is needed to prevent attrition of talented students early in the research career pipeline.

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In terms of access, improved transparency across the admissions process and the requirements of postgraduate degree and academic career is required to prevent students from NRI institutions, who may lack familiarity with admission criteria and the nature of postgraduate degrees, from being disadvantaged. Knowledge gaps create further barriers, as students from NRI institutions often lack early exposure to research pathways and resources essential for postgraduate progression. Despite excellent research and teaching happening in both RI and NRI institutions, discrepancies in undergraduate curriculums across institutions exacerbate knowledge gaps but it should be noted that this can vary significantly across disciplines. Catch-up programmes, research internships, and opportunities delivered in collaboration between institutions will be important tools to bridge the gap and provide the relevant knowledge and preparation to progress to a RI postgraduate degree.

Just as important as access, supporting a diverse range of students to succeed in postgraduate study and beyond is vital. The sector is very aware of how research culture can impact the success and mental health of students, and there is evidence that this could be even more so for those from NRI backgrounds in RI postgraduate settings. Isolation, imposter syndrome, and inadequate support from supervisors are common issues. By emphasising cultural inclusivity, delivering comprehensive supervisor training, and reviewing the academic career progression structure, institutions can foster a more supportive academic environment.

In order to create lasting and wide-reaching change, sustained sector-wide dialogue is required to keep this challenge and potential interventions high on the agenda, without which it cannot be addressed in an effective way. Many of the interventions discussed in this report are underpinned by collaboration, between RI and NRI institutions, but, equally importantly, with policy makers and students themselves. This collaboration is vital to ensuring there is momentum to put in place a host of interventions that are student-centred, rather than piecemeal action that is not tailored to the student experience. There is lots to be positive about with a keen desire across the sector to push for equitable access to postgraduate study and research opportunities, and to adapt postgraduate admissions and research cultures to increase diversity of talent. The Martingale Foundation and Public First remain committed to driving this agenda forward, striving to push for further dialogue on the challenges and interventions discussed in this report and leveraging these insights to influence policy and institutional practices for greater diversity in the UK's postgraduate landscape.

# Introduction

Martingale Foundation was founded in 2022 to tackle the challenges faced by talented students from low-socioeconomic backgrounds in accessing and thriving within postgraduate study. Since then, our data has shown that mathematics students from non-research-intensive (NRI) universities struggle to access, transition, and thrive in research-intensive (RI) postgraduate courses (PGT or PGR).

Further discussion and research has shown this to be a wider concern for many institutions, with talent being lost early in the research career pipeline. With UK-domiciled PhD students on the decline<sup>1</sup> and students increasingly choosing their undergraduate (UG) university based on environmental and financial reasons<sup>2</sup>, the sector is losing diverse talent that is vital to driving the creative and world-leading research that addresses the complex challenges of today's current climate.

The challenge to support students from an NRI background into RI postgraduate (PG) degrees can be split into five progressive and interlinking steps:

1. There is evidence that students are increasingly choosing universities closer to home for UG study partly due to pressures such as cost of living<sup>3</sup> and caring commitments<sup>4</sup>.
2. Due to the uneven geographical spread of RI universities, some students are undermatching and not attending universities that match their academic attainment<sup>5</sup>.
3. However, if an individual wants to progress to a postgraduate degree, particularly a PhD, those opportunities are pooled at RI universities.
4. Recent evidence shows that there is a significant difference between rates of progression for students moving from NRI universities at UG level to RI universities at PG level compared to those who have studied at a RI undergraduate university. It also points to the majority of students staying in their previous institution if transitioning to postgraduate study<sup>6</sup>.
5. This is likely not due to a lack of academic ability at school-level, as evidenced by the extent of undermatching in the UK<sup>7</sup>, but it is likely that, because of the differing pedagogies and academic content at NRI institutions compared to RI institutions, those from NRI institutions do not have the appropriate foundational knowledge prior to starting a PG degree at a RI institution.

This means that a decision made at age 17 or 18, of where to study at UG level, has the potential to prevent talented students from progressing to postgraduate irrespective of academic talent, financial need or the widely acknowledged 'hidden curriculum'. Even those from an NRI background who are gaining places at RI institutions for PG degrees may find themselves struggling to adapt compared to those from RI backgrounds as they may not have the same cultural capital and the research culture may not be as suited to their needs, leading to attrition.

This report provides a summary of the roundtable discussion held to understand the barriers to progression into postgraduate study that are unique to, or exacerbated for, students who wish to transition from an NRI to a RI university.

## Spotlight on 'Matching in the dark? Inequalities in student to degree match'

Undermatching is a key foundational factor leading to barriers to postgraduate study, and therefore, research careers, further down the pipeline for those from NRI and often underrepresented backgrounds.

Stuart Campbell et al.'s paper on this subject is important in detailing the extent of undermatching in the UK. They find significant under- and over-match in the UK with 30% of students mismatched when they measured course quality based on attainment.

Source: Stuart Campbell, Lindsey Macmillan, Richard Murphy, Gill Wyness, 'Matching in the dark? Inequalities in student to degree match', *Journal of Labor Economics*, 40:4 (2022), 807-850.

1. Jack Grove, 'Is Doctoral Education in the U.K. in Trouble?', *Inside Higher Ed*, 12 January 2024 <<https://www.insidehighered.com/news/global/2024/01/12/doctoral-education-uk-trouble#:~:text=The%20decline%20in%20U.K.%20student,to%20%2C840%20in%202022%E2%80%9323>> [accessed 16.10.24]

2. Michael Donnelly, Sol Gamsu, 'Home and Away', *The Sutton Trust*, (2018).

3. Donnelly, Gamsu, 'Home and Away', p.8.

4. 'Next Steps: What is the experience of young adult carers in education?', UCAS, (2024), p.5.

5. Campbell, Lindsey Macmillan, Richard Murphy, Gill Wyness, 'Matching in the dark? Inequalities in student to degree match', *Journal of Labor Economics*, 40:4 (2022), 807-850.

6. José Luis Mateos-González, Paul Wakeling, 'Exploring socioeconomic inequalities and access to elite postgraduate education among English graduates', *Higher Education*, 83 (2022), 673-694.

7. Campbell, et al, 'Matching in the dark? Inequalities in student to degree match'.



## Framing the discussion

It is important to frame this discussion with the key differences between NRI and RI institutions but also the strengths and successes of NRI universities, which despite being grouped as non-research-intensive for the purposes of this report, do produce excellent research with many having high teaching standards. However, particularly for teaching, this may be centred around different criteria for success (e.g. preparing students for different career paths and graduate outcomes), and does vary depending on the discipline, more of which is discussed below.

Resource is one of the most obvious differences between NRI and RI institutions, with fewer laboratories and choices of topic for example. Collaboration between institutions and redistributing studentships, as pointed out by Dr Rebekah Smith McGloin, has the potential to go a long way to addressing the difference in resource and supporting all students who wish to follow a path to academic research.

There are also important differences between PGT and PGR programmes, a key difference being the involvement of a supervisor, and studying via taught modules vs research. While this report addresses both types of postgraduate degree, we want to emphasise that each requires distinct approaches due to their differing admissions processes, formats, and academic expectations.

Furthermore, the report acknowledges the differences between STEM and non-STEM subjects, and indeed the differences between disciplines in each of these wider categories. Each discipline has different structures leading to differing interventions that need to be tailored to address these subject-specific requirements. For example, PhD students are integral to a supervisor's ability to conduct research in some sciences, which means the academic progression and supervisory structures are very difficult, or even impossible, to alter without significant implications. A one-size-fits-all approach will not be sufficient to drive meaningful change.

Another important factor to consider is the role of regulation in promoting progress. The role of regulation in promoting progress, and improvements in this area could help foster change more effectively and quickly. Regulatory bodies such as the Office for Students (OfS) and UK Research and Innovation (UKRI) play a crucial role in shaping these policies. In many parts of the sector, action is often slow unless driven by regulatory pressures. Therefore, regulatory interventions could be instrumental in accelerating improvements, ensuring that institutions move quickly and effectively towards achieving greater collaboration, transparency and support.

While much work remains to be done to improve access to postgraduate courses for individuals from NRI and underrepresented backgrounds, progress is being made. Awareness around this issue is growing, and positive steps are being taken. At this pivotal moment, we aim to be at the forefront of this effort, championing discussion and collaboration, and ensuring that these issues remain a priority for institutions and policymakers and advisers alike.

**'Only 47% of admissions tutors and others involved in recruitment felt that current selection criteria were good indicators of whether a student would become an independent researcher'**

## Transparency in admissions

There is ongoing debate about what defines the 'best' student, but there is no consensus on what makes an excellent candidate within most disciplines. Institutions of course seek the best students, yet anecdotal evidence suggests that academics struggle to define the characteristics needed to make a good doctoral student in their particular subject. This lack of clarity can disadvantage students from underrepresented backgrounds, who may not conform to traditional ideas of what a top candidate looks like and who may be less likely to have a first-class degree.

A survey from Equity in Doctoral Education through Partnership and Innovation (EDEPI) showed that only 47% of admissions tutors and others involved in recruitment felt that current selection criteria were good indicators of whether a student would become an independent researcher<sup>12</sup>. This reveals a potential misalignment between admissions criteria and assessment, and the skills needed to be a successful PGR student.

In lieu of a lack of clarity on what universities are using to identify the best students, some supervisors rely heavily on previous academic achievement and the type of institution a student studied at as the main assessment criteria despite this causing a potential barrier to access due to systemic inequalities, as noted in the report produced by Nottingham Trent University as part of the EDEPI project. Indeed, an open letter from UK academic staff to the Executive Chairs of UKRI funding bodies challenged the heavy focus on academic "excellence" in doctoral admissions, questioning whether such emphasis accurately captures the qualities necessary for success in a research environment<sup>13</sup>.

Unsurprisingly given the lack of consensus on what makes the 'best' student amongst those in the sector, universities often fail to specify exactly what they are assessing in postgraduate admissions, making the process particularly opaque. This lack of transparency, especially pronounced in PGR admissions, can be seen as part of a "hidden curriculum". By contrast, most other areas of education and employment—such as UG admissions or recruitment into leading companies—operate with a clear assessment framework. This raises the question of whether a similarly structured framework could be applied to postgraduate admissions to bring about greater fairness and clarity.

12. Dr Rebekah Smith McGloin, et al, 'Postgraduate Researcher Admissions Report', Equity in Doctoral Education through Partnership and Innovation (EDEPI), (2024), p.15.

13. Sam Giles, Alexander Bond, Ben Britton, Heather Ford, Sarah Greene, Stuart Grieve, Christopher Jackson, Sabine Lengger, Kate Littler, Rich Pancost, Open Letter Concerning CDT and DTP Student Recruitment Across the UK [Open Letter] (2020) <<https://docs.google.com/document/d/1ElnAKFl7px2DxYv-sAZxVOyTjkm-AE29CzFFnjxw6hg/edit>> [accessed 23.10.24]

One of the most discussed solutions to the lack of transparency and uniformity in postgraduate admissions is to create a centralised application system similar to UCAS for UG admissions. This would enable a clear and simplified process with the added benefit of improved tracking systems. However, the idea of moving postgraduate admissions to a centralised system warrants careful consideration. Before any major changes are implemented, it is important to understand fully what such a shift would entail. While it might be more feasible for PGT courses, there are concerns that applying this approach to PGR could undermine existing good practice. While a centralised system possibly based off UKPASS, the UCAS postgraduate application service, could offer some benefits, it might also risk dismantling effective processes currently in place and encourage the use of a narrow admissions criteria based on prior academic achievement. The lack of uptake with the UKPASS system suggests that as it stands it is not currently meeting the postgraduate admissions requirements and needs of most institutions. Instead, there may be smaller, more manageable adjustments that could be implemented to improve postgraduate admissions. It is important to strike a balance between the benefits of a more centralised system, like UCAS/UKPASS, and maintaining the valuable work already being done in PGR admissions.

Beyond the initial application itself, interviews are a key part of the admissions process, yet many candidates are unsure how to prepare for them. This stage often proves particularly challenging for students who do not fit the typical student profile, with the Martingale Foundation finding a 17% drop in the proportion of NRI students between the interview and offer stages for applicants pursuing Martingale Scholarships in postgraduate mathematics degrees. The difficulties faced by candidates from NRI and underrepresented backgrounds at the interview stage are similar to those encountered in job interviews, where they are more likely to drop out at this stage. Often, interviews reveal that some students lack the foundational knowledge or experience needed to thrive in a postgraduate course, which may particularly affect disciplines that require specific prerequisite knowledge such as mathematics. The implications and possible interventions of a lack of foundational knowledge or experience are discussed in more detail in the 'Gaps in knowledge' section of this report.

There is also the issue of bias, both on an individual basis but also regarding institutional/departmental criteria, that can affect the outcome of interviews. This creates barriers even for candidates who do have the sufficient foundational knowledge. Sam Giles et al. raise this as a significant issue in their open letter and state that the recruitment and selection "criteria [used by many CDTs and DTPs] implicitly capture access to opportunity rather than ability and potential."<sup>14</sup> This is compounded by the hierarchical way in which previous experience is often valued, raising the question of how PhD applicants' diverse experiences are assessed.

Supervisors play a pivotal role in most PGR interviews, yet this can also represent a single point of failure in the process. There is ongoing debate about whether supervisors should be involved in interviews at all. While excluding supervisors from the interview process works in some models, like CDT/DTP programmes, it is less feasible in cases where a student works closely with one PhD supervisor throughout their doctoral programme.

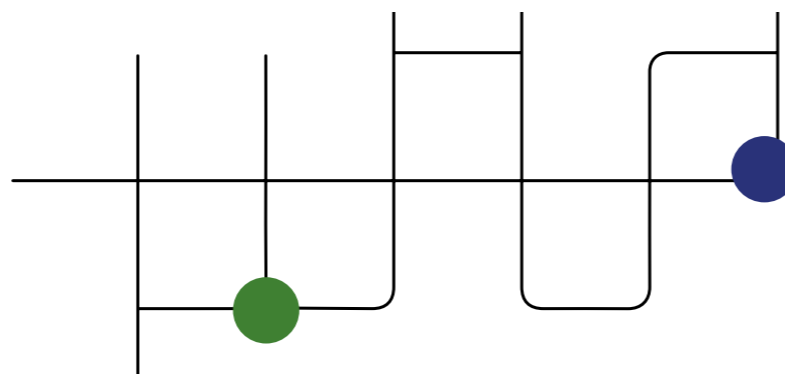
One possible solution could be a communal first year, where students follow a broad programme supported by a team of academics, rather than working with one supervisor throughout. However, it is important to acknowledge that supervisors may need to devote extra time and resources to support students from NRI backgrounds. Given the high pressure that supervisors already face, there is little incentive for them to take on students who may need more support. Indeed, in some disciplines where PhD students are part of the research team structure, it is important that students are able to contribute at an early stage in their programme in order for the project as a whole to succeed, leading to even less incentive in certain disciplines to take on students who may need more support at the start. This issue is also linked to the fact that teaching can be undervalued within academia, with minimal time and resource allocated to supervisory practice.

Several potential interventions can be put in place to address the lack of transparency in postgraduate admissions that poses a barrier for those whose previous experience is in an NRI institution. Most importantly, the admissions process should be designed from the perspective of the students, including students from an NRI background, with a focus on making it more transparent and equitable. This might be involving student representatives in the admissions process and implementing candidate feedback into the process.

There should also be greater transparency in the postgraduate admissions process, so that prospective students can easily find relevant opportunities and can understand clearly what they need to submit and do in order to succeed. This might be a more centralised and standardised approach. This should also help prospective applicants understand what their chosen course at a particular university will prepare them for (more on this in the 'Gaps in knowledge' section). Additionally, the role of supervisors in the interview process should be carefully considered.

One suggestion is to apply preferential weighting in interviews for candidates from NRI backgrounds to ensure that these applicants are fairly assessed. Another possible approach, and one which is already in practice to great success in programmes and partnerships in the US such as the work of Professor Keivan Stassun in astrophysics between Vanderbilt and Fisk universities, is to create joint PhD programmes between RI and NRI universities, fostering collaboration and enhancing access for students from diverse backgrounds.

A framework for creating a more standardised approach to postgraduate admissions is a key output in the report produced by Nottingham Trent University as part of the EDEPI project that includes sample interview questions, offering a useful starting point for developing a more standardised competency-based approach to interviewing PhD candidates and providing valuable insights into how the interview process might be improved, ensuring that candidates are assessed more fairly and effectively, regardless of their academic background and the institution they have previously studied at.



## Gaps in Knowledge

Many students, particularly those who are the first in their family to attend university, lack awareness of and exposure to the various pathways to PG research, such as different routes and types of doctorates like those run by CDTs and DTPs, which are largely found at RI universities. For these students, PG research may feel inaccessible due to funding challenges, the high cost of living, and the competitive nature of these programmes. Additionally, many students have spoken about the 'rude awakening' they experienced upon realising the intensity of doctoral study which highlights a lack of knowledge prior to starting their doctoral studies.

A significant issue in this context is the gap in knowledge regarding what is required to be prepared for and to progress to postgraduate research. There are many students who believe that PGT degrees lead naturally into postgraduate research. However, in many STEM fields, a PGT qualification is not a direct gateway into research; instead, becoming a research assistant and/or completing research placements are often a more practical way of accessing PhD opportunities. This lack of transparency around the pathways to doctoral study, especially where many pathways involve moving institution and therefore, access to those running programmes is not as readily available, leaves many students unprepared and unclear about their options.

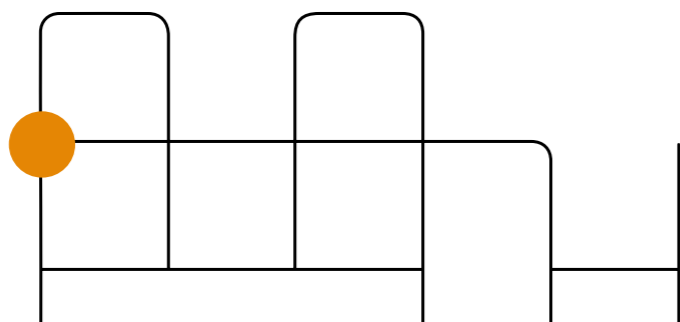
Inconsistency in pedagogy across the sector further complicates the situation. There is a need for honesty about the differences in educational approaches, even within the same subject areas, at UG level across different institutions. Post-1992 universities, for example, often train students for different career paths, not necessarily for a career in academia, although it is important to note that this can vary across subject area and across institutions with some NRIs well known as leaders in specific fields of research, or excelling as providers of professional PhDs. It is crucial that students from post-1992 or NRI institutions who want to progress to a research career, do not feel like they have failed if their education does not align with academic progression. Whilst there is anecdotal evidence that this problem persists throughout postgraduate study, the challenge varies in severity depending on the subject. Therefore, as mentioned in the introduction to this report, interventions for this challenge will vary according to the subject and will require a nuanced approach – in some cases it may just require actions to further prevent unconscious bias, other subjects may require a more intensive look at the difference between curriculums. Ultimately, in all cases, the current situation requires more transparency so that students can make informed decisions both before applying for UG study, and during their UG study, to best navigate the higher education landscape according to their career aspirations.

It is important, too, to overcome the challenge posed by the assumption that it is solely the students' responsibility to research potential career pathways, and what type of institution, for both undergraduate and postgraduate study, may best fit their needs. Placing the responsibility on the student may place an undue burden on them, and there is lots more that can be done by universities and the education sector more broadly to be clearer with those researching the best university for them and their aspirations, particularly when researching undergraduate study.

The issue of undermatching also arises in these discussions. If undermatching – when capable students attend less selective universities than they are qualified for – is not properly addressed, and there are few systems in place to bring students up to speed after courses that do not prepare them for academic careers, we risk writing off these students as early as age 17 or 18. An example of the combination of a gap in knowledge and undermatching can be seen in the doctoral research conducted by Dr Maisha Islam, Doctoral College Research Culture Lead (Equality, Diversity and Inclusion) at University of Southampton, with one student in the study reporting that they rejected a place at a RI university because she was unaware of its prestige at the time, later expressing regret for that decision<sup>15</sup>. More research is needed in this area to examine whether this is a general trend amongst British-Bangladeshi and other racially minoritised or underrepresented students and where this sits in the wider context of undermatching. The undermatching phenomenon is further explored in research such as 'Matching in the Dark? Inequalities in Student to Degree Match,' which examines how these inequalities affect student outcomes<sup>16</sup>.

This leads to a broader discussion on university status in the UK. The assumption that RI universities are inherently more prestigious requires reconsideration – more so than can be achieved in this report. There may be a need to rebalance perceptions of university status, challenging the view that NRI institutions are routinely seen as inferior, while recognising that institutional missions vary their emphasis.

Potential interventions to these challenges include introducing catch-up programmes, such as a Masters-level foundation year, similar to that of an UG foundation year but also following the same financial structure where an extra year of funding would be required. A similar example includes CDTs that run a 1+3 structure or programme where the first year is a Masters degree followed by the PhD. Alternatively, programmes could be implemented alongside UG studies to help post-1992 and NRI students catch up, such as summer research projects ringfenced for these students. These could offer both technical and subject-specific training, as well as guidance on how to navigate the academic culture and succeed in interviews. Good examples of similar programmes already in practice are the In2Research programme<sup>17</sup>, UNIQ+ Research Internships, Generation Research, and smaller summer research programmes like those run by universities and institutions like [London Interdisciplinary Doctoral Programme \(LIDo\)](#). Both programmes could lead to students who are informed, confident in applying to programmes, and are not held back by lack of academic or technical knowledge. To maximise success, RI and NRI institutions should collaborate to provide a similar level of resource and opportunity to students who aspire to postgraduate study and research during their UG and postgraduate education.



15. Maisha Islam, The Gold Dust of Academia: British-Bangladeshi Women's Access into and Experiences of Postgraduate Research, presented on 02.11.23, data in unpublished thesis, University of Winchester.

16. Stuart Campbell, et al, 'Matching in the dark? Inequalities in student to degree match'.

17. 96% surveyed for the 2023 Impact Report stated that the programme has improved their confidence in applying to, and their ability to undertake, a PhD programme (In2Research Impact, <<https://in2scienceuk.org/impact/>> [Accessed 31.10.2024]).



Providing clear and systematic information on what is required to progress in academic careers is essential, and this should be tailored to each subject area. Widening participation programmes and networks could also play a crucial role in informing students about postgraduate options, focusing not only on UG education but on pathways beyond it, particularly into PG study and an academic career.

Recommendations from reports like UCL's 'Barriers to Doctoral Education', which suggest initiatives such as summer bridging programmes, pre-doctoral programmes, and creating a centre for UG research experiences, are excellent examples that could be instrumental in addressing these issues<sup>18</sup>. Additionally, alongside the Martingale Foundation's role championing and facilitating this discussion, there is space to support the creation of a resource hub or platform similar to those like Tomorrow's Engineers<sup>19</sup>, to provide further guidance and resources for students navigating PG options and careers in academia.

**'Financial factors, which restrict students' educational choices, present one of the most challenging obstacles to accessing doctoral education, but there are also nonfinancial factors which have an important influence on progression to, and completion of, a PhD. These include the undergraduate awarding gap as a disqualifier, availability of knowledge about the research environment and awareness of potential career paths, visible lack of role models, access to mentorship, inclusive and equitable treatment, connection to community, and sufficient and appropriate support mechanisms and resources'**

BARRIERS TO DOCTORAL EDUCATION, UCL

## Polarisation of research degrees

A small number of universities dominate the landscape of postgraduate research programmes. In 2021/22, Russell Group institutions hosted more than half of all PGRs<sup>20</sup>, yet they only make up 15% of UK higher education institutions. This significant concentration of PhD programmes within a select group of universities highlights an uneven distribution of research opportunities across the sector.

The concentration of PhD programmes raises important questions about whether this distribution truly serves the higher education sector, as it creates challenges for equitable access. Many prospective postgraduate researchers may face barriers in accessing prestigious research programmes due to this concentration. This issue is particularly relevant in fostering diversity within research fields and ensuring that students from all backgrounds have fair access to opportunities.

At the same time, it is necessary to acknowledge that some level of concentration in certain disciplines, especially in STEM subjects, is unavoidable due to the facilities and resources required. Highly specialised equipment and laboratories are often only available at large, RI universities. However, the extent to which this level of concentration is unavoidable remains a point of debate.

One important solution to these challenges that is already being used across the Higher Education sector, lies in fostering greater collaboration between RI and NRI, or post-1992, universities. A notable example of this approach is the London Interdisciplinary Doctoral Programme (LIDo), which is run by a consortium of universities including the University of Greenwich, Birkbeck and Royal Holloway, with the University of Greenwich being one of the few post-1992 institutions that leads a Doctoral Training Programme. Its success has primarily been in other diversity areas such as gender, disability and ethnicity, but is keen to build on these successes and its partnerships between NRI and RI institutions to improve access and progression for those from NRI institutions transitioning to postgraduate study and research. This type of collaboration demonstrates how NRI universities can take on a leading role in offering doctoral research, broadening the options for those wanting to pursue a PhD, providing a more inclusive model for the sector. Collaboration also overcomes issues of RI universities pooling talented students and supports good faith across the sector, where talented students can move into academic research and support their post-1992/non-research-intensive university's research base and culture rather than having to take their talent elsewhere.

# Research Culture

## Lack of belonging

Sustaining the postgraduate or academic journey requires far more than simply providing access support. While supporting access and funding is undeniably important, it is not enough to ensure the long-term success and wellbeing of postgraduate students, particularly those from NRI undergraduate backgrounds.

The Higher Education sector is currently sitting in the context of a student mental health crisis, which is especially pronounced among PhD students. Research, such as the study titled 'Risk of Interruption of Doctoral Studies and Mental Health in PhD Students', highlights the mental health crisis and the risks this poses for individual students and the sector as a whole<sup>21</sup>. They emphasise the need for holistic support and an inclusive research culture that is able to support and accommodate those that are underrepresented.


One of the key challenges faced by PhD students is isolation. Many PhD students report feeling that they do not belong in either their new academic space or with their friends, family and/or home area they have left behind, which exacerbates feelings of loneliness and alienation. Students from NRI universities are likely to fall into this space once joining a RI institution at postgraduate level if the motivation for studying at an NRI university at UG level was to stay close to home. This issue is deeply intertwined with the broader research culture, which is currently undergoing shifts in response to growing recognition of these challenges. Funders and institutions are increasingly focusing on improving research culture to address these issues, as highlighted in reports such as the Wellcome Open Research's 'Understanding Research Culture' report<sup>22</sup> and the 'Royal Society Changing Expectations Conference' report<sup>23</sup>. This research underlines the difficulties faced by both students and institutions when it comes to inducting individuals and "the focus on narrow measures of performance and productivity" which doesn't always serve to get the best out of those who have different needs or come from different backgrounds<sup>24</sup>. Much of the cultural capital within academia remains uncoded, often being transmitted informally or being implicit rather than as part of structured support, making it harder for new researchers to navigate the research culture.

A key area for intervention is in the training of supervisors. There is a pressing need to ensure that supervisors have the appropriate expertise, and for training on how to support non-traditional students to become a more common practice within institutions. Encouraging the use of external supervisors can also help broaden knowledge and support for students. Additionally, institutions must offer more flexible options and support for students with diverse lifestyles, such as those with caring responsibilities, or students who are working alongside their studies.

Another challenge is the mismatch in expertise found at NRI or post-1992 universities. These institutions often do not have as broad a range of expertise as RI institutions, making it harder to ensure a satisfactory match between students and supervisors. This can hinder the academic progress of postgraduate students who may struggle to find supervisors with the specific knowledge they need. Alternatively, if prospective PG students want to follow the expertise of their area, they are likely to need to move to a RI institution that may be far from their previous institution, both geographically and culturally.

To address these issues, it is essential to codify cultural capital in academia, recognising that at the moment much of it is implicit knowledge passed down informally but is something that can be written and formally passed on. By making this knowledge more accessible, we can help to ease the transition into research culture for new students. Furthermore, the role of the supervisor within research culture must be reiterated and strengthened, as discussed in more detail in the next section. Properly informed and trained supervisors are central to fostering a healthy and supportive academic environment.

There is some positivity here with a wealth of research being conducted in this space and some good examples of schemes and programmes to make research culture more inclusive and work for everyone such as the Academic Futures programme at the University of Oxford. These insights offer valuable perspectives on the challenges faced by postgraduate students and the current programmes addressing research culture and diversity can inform further interventions for creating a more supportive and diverse academic culture.



One of the key challenges faced by PhD students is isolation. Many PhD students report feeling that they do not belong in either their new academic space or with their friends, family and/or home area they have left behind, which exacerbates feelings of loneliness and alienation.

## Supervisor relationships

Currently, PhD students face numerous challenges, and the ability to overcome these is closely linked to the quality of their relationship with their supervisor. A strong and supportive supervisor-student relationship is vital to the success of both the student and the overall project. Supervisors play a crucial role, although it is important to this discussion to note that their level of involvement and specific responsibilities can vary significantly depending on the subject area. In some disciplines, supervisors may engage in frequent, hands-on guidance, while in others, their interaction may not be as frequent and focused on broader academic goals.

This is a reflection of the reality that completing a PhD often requires the support of multiple individuals. In some institutions, a dedicated staff member is assigned to provide pastoral support to students, in addition to an academic supervisor. This approach ensures that students receive comprehensive support and avoids a single point of failure if the relationship with a single supervisor deteriorates. Additionally, many universities have introduced thesis committees, which involve multiple academics providing guidance and feedback throughout the PhD process, allowing supervisors to focus on their strength areas in supervising. The DTP and CDT models, where students receive broad-based support from multiple supervisors and follow an introductory programme in their first year before being assigned to a specific supervisor, offer an alternative that could be expanded.

Supervisors need to be well-equipped to guide their students, and the importance of training on research culture during a supervisor's induction may not always be a priority with the often heavy workloads that academics carry. Ensuring that supervisors receive adequate training at the beginning of their role is crucial for fostering a productive and supportive environment for students.

There is also scope to reconsider the current academic structure, particularly regarding role allocation and what is required for academic career progression. At present, academics who are not necessarily suited to supervision may feel compelled to take on this role in order to advance their research careers. This is especially true in fields where PhD students contribute significantly to the research output of their supervisors. Institutions could consider another route where researchers are able to progress in their careers without being compelled to supervise if this is not their strength. However, a one-size-fits-all approach may not work across disciplines. In some sciences, for example, PhD students are integral to the research process, making it very difficult, or even impossible, to alter the existing structure without significant implications.

It is also worth noting that students who come from NRI backgrounds, who therefore, may not have all the implicit cultural capital or academic knowledge that peers from RI institutions may have, could require more intensive support, but in a climate of financial constraints and funding crises, this additional time and energy required from supervisors can put pressure on supervisors' time to secure grants and complete other essential research activities. This highlights the need for a more sustainable approach to managing the support of PhD students as we support a more diverse cohort.

To address these challenges, several interventions can be considered. Collaboration between NRI and RI institutions could play a significant role in opening up additional teaching, research opportunities, and networking to those who may need more support to get up to speed with the research culture, and who may not have the relevant network to succeed. There are currently very few mechanisms for this, but there have been positive moves in this direction.

The Martingale Foundation and other organisations could introduce more thesis committees or seminars similar to those run by Leading Routes for PhD students from NRI backgrounds. These committees would provide an additional layer of support, allowing students from NRI backgrounds to flag any challenges they are experiencing with those who can provide support early on. This could help reduce attrition rates by offering students a platform to discuss their thesis beyond their primary supervisor. However, it is essential that the Martingale Foundation, or any other organisation running a thesis committee, ensures this system is viewed as an opportunity for constructive support rather than as an additional hurdle to overcome and additional work to complete.

In addition, re-thinking the academic structure could lead to more effective supervision. By implementing changes that better suit the needs of different disciplines and the individuals within them, the system could become more flexible, allowing academics to focus on areas where they excel without being forced into supervisory roles that may not suit them. These changes would ultimately lead to a more supportive environment for both PhD students and their supervisors, supporting research culture as a whole and reducing attrition of talented students and early career researchers.

Currently, PhD students face numerous challenges, and the ability to overcome these is closely linked to the quality of their relationship with their supervisor. A strong and supportive supervisor-student relationship is vital to the success of both the student and the overall project.

## Conclusion

This roundtable is part of a vital dialogue on how we can better support talented individuals as they navigate the transition from NRI to RI institutions. A sincere thank you to all participants and contributors for dedicating their time and sharing their expertise. The rich discussions we had has not only underscored the breadth of the issue but also revealed the complex, nuanced challenges in addressing it.

We find ourselves at a pivotal moment: our higher education system is losing potential talent. Many promising individuals are being undermatched, studying at institutions that do not align with their capabilities or ambitions at UG level, leading to difficulties progressing into postgraduate study and academic research. A research culture that is not yet designed to sufficiently support those from NRI backgrounds moving into RI institutions is compounding the problem. This talent drain is one we cannot afford when the Higher Education and research sectors are at the forefront of combating complex global problems that will require diversity of thought and research to overcome. However, the passion, dedication, and innovative solutions brought to the table during this roundtable discussion and the projects that are supporting widening access to PG education has highlighted that, while there is a considerable journey ahead, there is also much to be optimistic about. The energy, commitment and willingness to collaborate demonstrates a genuine commitment to fostering change, but to keep this momentum, we must now ensure that the conversation continues, and action is taken.

To make meaningful progress, measures to address the problem should not be implemented in a piecemeal, individualised basis but rather a concerted set of interventions should be put in place to address the problem at multiple stages of the pipeline, across disciplines. Collaboration is key to this, and it is at heart of many of the proposed interventions and solutions listed in this report—whether that means exploring opportunities to work across institutions, particularly across RI and NRI institutions, fostering partnerships, working with policy makers and regulation bodies, or engaging stakeholders more effectively. We must build greater transparency into admissions processes, so that talent is matched more appropriately to opportunity. Furthermore, we need to engage in honest conversations about the reality of the Higher Education sector and the differences in pedagogy between NRI and RI universities. Without this transparency, we will continue to see students lost to a system that can be too unclear and complex to navigate, from admissions through to the research culture.

Our call to action is simple: continuing to facilitate discussion and push for action. The central aim of this roundtable and the subsequent report is to stimulate ongoing conversations that can lead to real change. Leaders, policy makers and practitioners in the Higher Education sector need to engage in continuous reflection and debate on improving access to and success in RI postgraduate courses.

Both the Martingale Foundation and Public First are committed to carrying this agenda forward. We will take the insights from this roundtable and continue to build dialogue across the sector, working to champion these issues and drive the change that is needed to support those from non-research-intensive backgrounds to succeed.

## Acknowledgements

Many thanks to everyone who contributed their time and thoughts to this vital discussion.

With special thanks to our reviewers Professor Paul Wakeling and Dr. Queelim Ch'ng, and to our chair Jonathan Simons.

Thank you to all of our contributors and those who provided feedback and responses to this roundtable report.

## Responses

'This report is a timely and vital exploration of the challenges many talented students face when progressing from non-research-intensive institutions to research-intensive postgraduate study. Postgraduate degrees are critical not only for personal and professional development but also for driving innovation and addressing global challenges.

Yet, for many students, opaque admissions processes and the lack of clear, coherent statements of necessary prior learning, often create unfair barriers to entry. Even those who do manage to gain a place within research-intensive postgraduate programmes often struggle unnecessarily.

One of the simplest yet most impactful steps we can take is to codify this hidden knowledge—making explicit the expectations and pathways for postgraduate progression. It also demands greater collaboration and reflection from universities on how they can improve transitions for these students between institutions with different missions and experiences.

Finally, we must do more to support students earlier, during their undergraduate studies, by equipping them with clear, practical information about how institutional differences affect postgraduate opportunities.

This report calls for collaborative and transparent solutions, ensuring that talent, not background, determines opportunity. It's a critical step toward a fairer, more inclusive research landscape.'

JOHN BLAKE  
DIRECTOR FOR FAIR ACCESS AND PARTICIPATION  
OFFICE FOR STUDENTS





'I would really like to commend the report's authors and all who contributed for giving focus to this particular aspect of equitable access and socially just pathways into postgraduate research (PGR) programmes. It is heartening to see the identification of critical dynamics that resonate with the literature, particularly the role of improving belonging, changing culture, and supportive supervisory relationships.

The importance of the report's emphasis on enhancing supervision through cultural inclusivity and comprehensive training cannot be overstated. Such training should address the intersections of social class, ethnicity, gender, and disability, ensuring that all supervisors are equipped to mentor and champion a far more diverse cohort that they are familiar with. Moreover, effective supervision cannot occur within a vacuum. It is heartening to see the report acknowledge that academics must be afforded the necessary workload, training and resources to engage meaningfully with their students.

However, cultivating a sense of belonging transcends supervisory relationships alone. It demands a holistic, institution-wide approach that actively reshapes departmental and research cultures, rather than merely instructing/teaching underrepresented students to 'conform'. In this vein, I am particularly encouraged by the report's challenge to the entrenched narrow notion of the 'excellent student,' which historically and currently has served to reinforce patterns of privilege within the sector.

Mental health issues among postgraduate research (PGR) cohorts are a pressing concern, exacerbated by intersecting social inequalities. The explicit focus on this is an essential part of the picture without which we have little hope of improving equitable PGR outcomes.

For too long, the narrative surrounding widening participation has fixated on 'fixing' students (who were never broken to begin with). The call to unmask the hidden curriculum and tackle structural barriers is commendable, as it seeks to dismantle the advantages conferred upon those with 'hot knowledge' and insider information.

However, I would encourage all readers of the report to be more expansive with their idea of what is a 'good' outcome for students. This includes but is not limited to completing a degree at a research-intensive university. Studying at different institutions offer students different experiences, and no individual course, university or choice is objectively 'bad' or 'good'. It is important we recognise and respect the value of all parts of diverse sector if we are to successfully spark the inter-institutional collaboration the report calls for.

I also encourage all readers of the report to tread carefully when it comes to the (mis)use of the idea of cultural capital. Bourdieu's work does not suggest that a lack of cultural capital is the root problem or social inequity; rather, he highlights that societal structures privilege certain elitist tastes and practices. The imperative drawn from his analysis is that we must reform the system itself and what it values, rather than suggesting cultural capital merely needs to be 'codified' in order for underrepresented students to fit in. It is important that we do not replicate the errors of previous (unsuccessful) widening participation initiatives that have misread Bourdieu's work, and so attempted to 'fix' students deemed to have 'lacking' or 'wrong' cultural capital. Instead, as universities, we need to look at our own value systems, and challenge ourselves to value what we have previously dismissed.'

DR ROSA MARVELL  
SENIOR LECTURER IN SOCIOLOGY  
UNIVERSITY OF PORTSMOUTH



'Our research has shown that those from disadvantaged socio-economic backgrounds are less likely to progress from an undergraduate to a postgraduate degree than their more advantaged counterparts and that getting a first in a degree at a research intensive university is a clear gateway to higher study, regardless of background. But for those who study elsewhere and achieve a first, there are big gaps depending on socio-economic background.

Many of the themes discussed in this report, such as undermatching and an increased likelihood of studying at university close to home, apply for students from low income backgrounds in particular. The Sutton Trust therefore welcomes this report. To tackle this issue, we believe RI universities should extend their widening access work to postgraduate level, including an explicit focus on recruiting students from a range of different institutions, as well as efforts to improve the attainment of disadvantaged undergraduate students to allow them to progress.

We also fully support the focus on transparency in admissions. Having a clear, joined up and transparent application process would benefit applicants, especially those from disadvantaged backgrounds who are less likely to have help and support with their applications. A more joined up system could also help to improve data on the application and success rates of students from different backgrounds at postgraduate level.

Universities should also focus on removing financial barriers, for example by ensuring course fees are fair and appropriate, and avoiding charging application fees for postgraduate courses.'

NICK HARRISON  
CHIEF EXECUTIVE  
SUTTON TRUST



'We need a diverse range of talented people to join the UK research sector, and non-research-intensive institutions play a vital role in that, providing many students from underrepresented groups with access to higher education. However, such students often then find the transition to postgraduate study at a research-intensive institution difficult. We welcome this insightful report on some of the barriers and challenges these students face when trying to access and succeed in research-intensive institutions. The Trust's own doctoral training scheme recognises these barriers and provides additional funding for students from underrepresented groups to complete a research Masters' degree prior to starting their doctoral studies. But the barriers go beyond funding and this report helpfully illuminates some of the challenges that need to be tackled.'

PROFESSOR ANNA VIGNOLES  
DIRECTOR  
LEVERHULME TRUST

