1. Provider Context

1.1 Our mission, our values

1. NTU is a teaching-intensive and research-inclusive institution, committed to enabling our students to transform their lives and enhance the social, cultural, and economic environment within which they live, study, volunteer and work. Our origin can be traced back to the Nottingham Government School of Design, established in 1843 to deliver innovation and skills to drive the prosperity of the textiles industry in the East Midlands. This vocational mission remains a core part of our ethos.

2. Two commitments underpin NTU's educational mission: social mobility; and industry focus. Our goal is to enable our students to transform their futures. These commitments can be seen across the University, in every strategic decision, in every new collaboration, and in every new building. For example, we were the first university to sign the Social Mobility Pledge. We have won several university of the year awards in recognition of our contribution to social mobility. Along with Kings College London and the Behavioural Insights Team, we initiated TASO, the UK 'What works' centre for social mobility in higher education. We acquired Confetti Media Group (CMG) in 2016 and have expanded significantly its ability to underpin the growth of the creative industries in the region by providing courses from level 1 to level 7. Our new £9m Dryden Enterprise Centre provides an inspiring workspace for entrepreneurs and SMEs, linking them to business advice and to undergraduate and graduate talent. Through our Alumni and Industry Fellowship Programme, over 1,000 Fellows across the globe have provided 12,000 hours of mentoring to our students and recent graduates. We source and fund paid internships for every graduate who needs help to kickstart their career. Alongside our commitment to social mobility and career focus, three principles guide our ways of working: we change lives, we are bold, we do the right thing. These principles guide strategic and operational decisions, from classroom to boardroom, as we shall demonstrate.

3. These commitments and principles are central to our current strategy, *University, reimagined*, as they were to the preceding strategy, and can be seen in the six strategic ambitions of: Creating Opportunity; Valuing Ideas; Enriching Society; Embracing Sustainability; Connecting Globally; and Empowering People. All these themes connect with our students, albeit the one that is most explicitly shaping their experience and educational gain is Creating Opportunity. Current strategic initiatives for this ambition include developing technical and vocational qualifications at levels 4 and 5, creating more flexible pathways for study, developing lifewide learning, and enhancing the student experience with person-centred design.

4. Implementation of the strategy is managed through our established frameworks for governance and quality, from monitoring of local plans by the University Leadership team to deep dives by the Board of Governors. The operation of our governance reflects our values, as highlighted by external auditors, such as the AUA in 2021, '*highly effective and efficient with all members encouraged to contribute and student representatives given a prominent platform*' (NTU, 2021a), and Advance HE in 2018, '*clear evidence that student voice and engagement was valued by the University*', and 2022, '*It is clear that the University Reimagined strategy frames the approach which the Board takes at NTU*'. Advance HE commended the way in which the Board of Governors used key performance indicators (KPIs) linked to the strategy. These KPIs are a further expression of our commitment to social mobility and industry focus, and include indicators for degree and graduate outcomes, student digital literacy, knowledge exchange, and citizen advocacy.

5. In summary, we create opportunities for students, particularly those from disadvantaged backgrounds, to develop the skills employers require and forge meaningful and rewarding careers.

We conceive of educational gain as building social and cultural capital, as well as technical and academic expertise (para 85).

6. Our values frame our collective sense of purpose and how we think of the institution. This TEF submission focuses on how these values translate into provision for our students. Of the optional courses, we have included apprenticeships.

7. In developing the submission, we have provided drafts to the Nottingham Trent Student Union (NTSU), sharing data and advice with them, while using separate governance structures to ensure no University influence on the student submission itself.

1.2   Our students

8. Numerous national studies indicate that most students participate in higher education to improve their employment prospects. This is certainly reflected at NTU. Our students say they chose NTU in particular because of the opportunities afforded by the range of modules and extra-curricular activities available (NTU, 2022a), because NTU feels like a place they could fit in and, because Nottingham is an exciting city (NTU, 2022b).

9. One way that our commitment to social mobility manifests is that we are among the UK's top five recruiters of students from disadvantaged backgrounds. For example, NTU consistently recruits a large number of undergraduates from low participation neighbourhoods (POLAR4 quintile 1). The number of black undergraduates increased by 106% between 2017/18 and 2021/22, compared with a 14% increase in white students. This success has been shaped by our outreach work with schools, our Fairness First offer-making strategy, and the profile achieved from recent accolades.

> **NTU undergraduates in 2022/23**
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> The profile of our students is central to our provider context. For 2022/23, the undergraduate profile comprised 92% home and 8% overseas. Of our home students, 70% join us from around the UK, 14% from Nottinghamshire, 10% from elsewhere in the East Midlands and 6% from the EU (with home status).
>
> In terms of equality characteristics, 87% of our undergraduates are young and 13% mature (aged 21 or over); 23% declare a disability. Of our home undergraduates, 68% identify as white; 12% black; 10% Asian; 6.5% mixed ethnicity; 1.5% other ethnicity; and 1% undeclared.
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> Our undergraduates' prior qualifications are: 52% A level only; 12% A level plus BTEC; 11% BTEC only; and 25% mainly other level 3 qualifications. Most of our undergraduates are first-degree students, with a small number studying via other modes, such as part-time and apprenticeships. Our largest schools are the School of Social Sciences (including our health provision), Nottingham Business School, and the School of Science and Technology.

10. NTU prides itself on being a comprehensive university and we are therefore working with a diverse student body, one which is unusual in the mix of national and local geography. Further, analysis of demographic data shows significant overlap in characteristics, meaning that many of our students face multiple challenges in terms of social inequalities. For example, our black students, in comparison to our white students, are five times more likely to have been eligible for free school meals, twice as likely to have a BTEC qualification, and twice as likely to have entered via Clearing. Each of these characteristics is, individually, associated with lower rates of academic success. This context profoundly shapes our approaches to student experience and outcomes.

11. Part of our strategy to widen participation in higher education is to diversify the qualifications we offer, particularly to provide alternative routes for vocational education. For example, 2022/23 is our seventh consecutive year of apprenticeship delivery and our portfolio of apprenticeship courses has grown in response to employer demand, from two programmes in 2016/17 to twenty-four in

2022/23. We work with 521 employers to provide training for almost 1,900 apprentices. The student demographic for these courses is different than our overall undergraduate picture (Table 1). NTU's apprenticeships programme, therefore, is proving successful in offering an alternative route into higher education for students from low socio-economic backgrounds, who may not otherwise have progressed to this level of study.

Table 1: Apprentice demographics compared with the wider NTU undergraduate population (2021/22). WP is defined in relation to IMD categories

Demographic	% Apprentices	% Undergraduate
Under 21	33.4%	87.5%
21-25	25.3%	7.5%
Over 25	41.3%	5.0%
WP	33.7%	27.9%

1.3   Our size

12.   The size of our student population is a significant consideration in how we plan and provide its educational experience and gains. NTU is the fifth largest university in the UK, with nearly 39,000 students and more than 4,400 staff. While we have been working at scale for some time, we have also grown significantly in the last four years. We have increased the undergraduate population by 25% in this period, from 24,000 to 30,000. Whilst based on growing student demand for our programmes, this growth has been planned and managed so that we can achieve our goals to widen participation and develop student careers that match skills to sectors.

13.   There are benefits and challenges in working at this scale. It gives us the capacity and capability to innovate and invest. It makes us highly resilient during periods like the pandemic, when otherwise development may have been impeded by financial pressure. It also means that innovations we adopt must work well at large scale, so that we can continue to provide a student experience where every student feels supported, inspired, and appreciated.

14.   In addition to working at scale, we are diversifying the types of qualification that we offer, to create opportunity for more people to participate in higher education. This, too, is an important factor in how we provide educational experience and gains, given that students undertaking apprenticeships, Higher Technical Qualifications (HTQs) and flexibly delivered professional qualifications are working in very different contexts than campus-based, full-time undergraduates.

15.   The University provides courses at five campuses, as well as with education partners and employers at their own sites. Our campuses include three locations in Nottingham, a land-based college to the north of the city, and a hub in nearby Mansfield. In 2023, a new campus will open in Whitechapel, London, providing courses in digital arts, production, and performance.

16.   Excluding validation-only services and TNE courses, we have collaborative partnerships for undergraduate provision with three providers: Access Creative College (franchise); School of Artisan Food (joint delivery) and Nottingham University Hospital (NUH) NHS Trust (joint delivery). In total there are 185 students across these partnerships, the majority of which are with the NUH NHS Trust. We also have a sub-contracted partnership with NUH NHS Trust and Nottinghamshire Healthcare NHS Trust for a Nursing Associate Degree Apprenticeship, with 134 students.

1.4   Our courses and why we provide these

17.   Our commitment to social mobility is central to our course portfolio strategy. Nottingham Trent University has a strong vocational ethos and a focus on preparing students for life after graduation. We have arrangements with over 70 Professional, Statutory and Regulatory Bodies (PSRBs), for over 200 courses.

18. Our course portfolio development is carefully researched, planned, and guided. We undertake extensive research into trends in what students want to study. However, there being demand for a subject does not necessarily mean we will offer a course in it; we must be sure that we can provide an excellent student experience and that the course will lead to a good graduate career. Workforce applicability is therefore *the* key factor in shaping our course portfolio; this is the operational manifestation of our career focus. All new course proposals are assessed for this, and our existing courses are reviewed annually against graduate outcomes indicators.

19. In practice, this is straightforward for subjects with clear links to a profession, such as architecture, and our courses in these areas offer technical and academic development combined with training for personal professionalism, such as networking skills and workplace presentation. Even here, we continue to create opportunities. For example, our CMG is a family of innovative businesses for students and practitioners in the creative, digital, and entertainment industries. Students at our Confetti Institute of Creative Technologies can 'Do it for Real', working in CMG's commercial enterprises, such as Notts TV. With two Royal Television Society awards, and a further 13 nominations, Notts TV has developed a reputation for high quality local television.

20. For subjects with less obvious links to a specific career, we have evolved courses beyond traditional academic offerings. For example, we reframed what was a traditional history degree by embedding digital skills and a focus on history's role in society and the economy. In so doing, we are preparing students for futures in digital copywriting and the heritage industry. In physical sciences, we emphasise forensics and medical technologies, and have introduced coding into physics, preparing for roles such as software architect and NHS scientist.

21. We use occupational standards in designing our courses, wherever these are applicable. We regard HTQs as a highly promising development. They offer a route for people who currently do not participate in tertiary education and may be crucial at the start of a career, and later, for upskilling or reskilling. For this reason, our development plan includes an ambitious strand of HTQ development. We also champion colleagues to look to the horizon in developing and redeveloping courses; to consider what skills will be needed in five- or ten-years' time. To support this, we have provided staff development on societal macro trends, undertaken research on workforce trends and labour market intelligence, and issued annual invitations to our schools for horizon proposals.

22. Examples of new specialisms developed in response to sector and regional needs include courses in nursing, paramedicine and critical care; aero engineering; and Higher Nationals in mechanical and electrical engineering and future home design and construction. However, because of the timescales involved, we are not yet able to use metrics such as graduate outcomes data to evaluate the efficacy of these more recent developments. We are therefore working to develop more proximate measures, using career readiness and leaver surveys. We also use qualitative data, for example, by seeking feedback from employers on graduates recruited.

23. Our research is another influence in the shaping of our course portfolio. In accordance with our overall mission, our research is applied, and focussed on collaboration with regional partners in the public and private sectors. It is not our intention to discuss our research strategy in this submission. Nonetheless, it is an important part of our context, and in REF 2021 83% of our activity was assessed as 4* or 3* and 86% of our impact was 4* or 3*; according to the Times Higher analysis, this meant that NTU was the most improved institution. We describe the University as 'research inclusive'. This is an emphasis on partnership with industry and community, and the many opportunities for students from all backgrounds to engage. We use our research strengths in shaping the course portfolio, from level 4 and 5 qualifications onwards. An illustration of this is green construction, in which we integrate a curriculum offer from Higher National to postgraduate with our research areas of strength. The latter are exemplified by our Queen's Anniversary Prize

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for Cultural heritage restoration and our ERDF funded Sustainability in Enterprise project, enabling students to help small and medium-sized enterprises in Greater Nottingham to reach Net Zero. The integrated curriculum and research, are, in turn, connected to our work to reduce carbon emissions in our buildings.

24. Our curriculum is therefore one of the major means in which we enact knowledge exchange, develop social mobility, and start or refresh careers. We recognise that our students will compete in job markets with students from wealthier backgrounds graduating from more famous institutions. Therefore, we need to provide a different and remarkable experience that helps our students succeed in their chosen field. In creating opportunity for students from disadvantaged backgrounds, we work with them to build social and cultural capital, as well as technical and academic expertise. This is our value proposition for educational gain. It is discussed in section three on Student Outcomes, but it can also be seen in the way we approach Student Experience.

Case study: Our commitments and principles in action

NTU's Mansfield HE Hub is a vivid illustration of our commitments (social mobility and career focus) and our principles (we are bold, we change lives, we do the right thing). The former mining areas of Mansfield and Ashfield, fourteen miles north of Nottingham, are two of the most deprived areas in the UK. We are working with civic and business partners to bring opportunity and prosperity to the locality; a bold initiative to meet the district's ambition to create a University Town.

In 2019 we established a partnership with Vision West Nottinghamshire College, within which we committed to provide higher education programmes at the College's main campus. The goal is to transform the skills of Mansfield and Ashfield residents, in the sectors where local employers need them most. Designed and delivered in consultation with employers, an integrated pathway from level 2 to level 7 features foundation degrees, higher nationals and apprenticeships. This partnership won the Nottinghamshire Business Award 2022 for Excellence in Collaboration.

The first 86 students graduated in 2021/22, and this year 510 students are upskilling or retraining to access employment in high-demand areas, such as nursing, paramedicine, engineering, business, criminal justice, education, childhood and community support, and sport and exercise science. For example, Sherwood Forest Hospitals' first cohort of Trainee Nursing Associates have just finished their two-year course. The group of 16 started the Foundation Degree Apprenticeship for Nursing Associates while employed by the hospital trust as Healthcare Support Workers. They have now all secured nursing associate roles at Sherwood Forest Hospitals. We believe we have enabled these local residents to change their lives.

The Mansfield Hub attracts a larger proportion of mature students than the wider NTU student population; 60% of students at Mansfield are mature, compared with 13% for other NTU undergraduates (2021/22 figures). Reflecting a much higher local demographic amongst its students, the Mansfield Hub also has a larger proportion of students from areas of low ranking in the Index of Multiple Deprivation (IMD); 53% compared with 27% at NTU. This different cohort profile has required a different design to ensure an excellent experience and student success. We have designed Mansfield Hub courses using block delivery, because this is positively associated with improved retention and outcomes for widening participation students (NTU, 2020a), along with our signature approaches for active collaborative learning and personal agency development. Data from interviews undertaken in December 2022 as part of an evaluation of the students' experiences, indicates that students see benefits in their improved confidence, team working and focus. These aspects of learning are central to our conception of educational gain.

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2. Student Experience

2.1 What characterises our approach for student experience

25. Within the framing of our context, our approach for student experience is characterised by three features: it is a whole-University responsibility; we focus on student belonging and community as fundamental; and, because of our size, what we provide must work well at large scale to provide a personalised experience. The whole-University ethos sets an expectation that student experience is everyone's responsibility. We promise at open days that we offer a student experience like no other and this is more than a recruitment slogan; it is manifest in the way colleagues talk about their roles, in how we recognise and promote staff, in what we prioritise at leadership level. Our approach to student experience is underpinned by the evidence that, no matter how strong the academic offer, it is students' engagement and belonging that will primarily shape their success (Thomas et al 2017). This is doubly true for NTU, where so many of our students come from disadvantaged backgrounds. Our focus on belonging and community can be seen, for example, in how we manage student transition, in our extensive use of active collaborative learning, and in how this shapes the estate for teaching and for social learning spaces. Finally, what we provide must work at large scale and for every individual. Hence, for example, educational development at NTU is focussed on determining not only pedagogic efficacy for our students, but also whether an approach works at scale. We have invested in more and better teaching spaces, and pedagogies that work for large cohorts.

26. An illustration of these in practice is our approach to student experience during the pandemic. Like all institutions, we worked hard to provide a good experience during periods of COVID restrictions. For example, we adopted the international benchmark Quality Matters to design our online learning and undertook a quality check for every module at launch. We instigated enhanced evaluation of the quality of all our revised provision, using sampling and student pulse surveys alongside our routine quality assurance, and working closely with the NTSU and Board of Governors. We innovated: for example, a new way of teaching pattern cutting resulted in enhanced sustainability and greater use of technology by students (Gough 2021); and 'Bioskills at Home' kits enabled year one microbiology students to learn the laboratory skills necessary for success on their course (Rayment et al 2022). We developed an online technique for our signature pedagogy SCALE-UP, to maintain the same principles of active collaborative learning in a virtual environment. Many services were delivered online, but the libraries remained open for vulnerable students to use (Customer Service Excellence, 2021).

27. However, Nottingham saw more restrictions than many other localities, with Tier 3 status implemented early on in 2020/21, local parks closed by the Council, and sharp police focus on student behaviour, on one occasion misguidedly entering NTSU. Our final years felt these restrictions keenly, and we saw a greater drop in NSS in 2021 than many other universities, particularly in areas normally underpinned by in-person engagement, such as Academic Support and Learning Resources. The impact on staff was palpable. Our response was a determined, whole-institution effort to re-create the excellent student experience we had provided on campus before the pandemic, whatever restrictions we faced. As soon as national guidance allowed in 2021/22, we returned to predominantly in-person teaching at a time when many institutions were continuing online. We conducted surveys and focus groups with returning students, the better to gauge how they were feeling and what they needed. They told us that they had lost confidence, that they wanted us to help them rebuild community, that they were worried about assessment and finding employment. Every department in the University redoubled our efforts in these areas. We invested an additional £1.5 million to: organise extra field trips, pizza study sessions, and special events; increase academic study skills and wellbeing support; run assessment breakthrough

sessions; tour a luminarium around the campuses; and fund LinkedIn and Office 365 licences post-graduation.

28. The outcome of this whole-institution effort was a much-improved student experience, and happier and more confident students. As consequence, NTU saw one of the largest increases in reported satisfaction in NSS 2022 in the UK, and a return to very strong NSS TEF indicators compared to benchmarks.

2.2 How we implement this, acknowledging challenges

29. In implementing our approach to student experience, we make significant investment in understanding our students' aspirations and experiences, conducting research at all stages of the student journey, and starting from when they first accept their offer at NTU.

30. When students arrive at NTU, we assess how satisfied they are with the welcome they receive, and how well they feel they have settled into life at university. We follow up with first year students in spring and again at the start of their second and final years. We conduct focus groups with students on selected courses or who share given equality characteristics or contexts such as commuting (NTU, 2019a). We undertake studies in partnership with students, for example a participant-led study of LGBT+ students' experience (NTU, 2019b). We support NTSU-led research, such as a study on black students' experience (NTU, 2019c), which led to the establishment of our Black Leadership Programme. One highly valuable tool we have developed in partnership with our students is the 'emotional journey map'. This tells us, for example, why many first years are reluctant to join a society part way through term, or when second years are more likely to be receptive to careers advice, or when final years students are most likely to need student support advice. Additionally, NTU was a pioneer in the development of learning analytics, based on our early work on engagement, belonging, and persistence (discussed in 'Learning environment', para 52). These research insights, combined with those generated in student representation and feedback, are invaluable for planning, improving, and communicating student opportunities.

31. We value the perspective that students bring to their learning experience and recognise that enabling students to contribute to shaping this can also increase their sense of belonging. We use the range of means for students to engage in enhancement activity that are common to the sector: course representation; committee and board representation; school and university student-staff forums; and student involvement in course approval and review. There is also a history of effective working between the NTSU and NTU Executives, one which was very useful in responding to, for example, the 'no detriment' movements during the pandemic, both in formulating policy for fair assessment and in its communication. This can also be seen at Board level. Reviews in 2018 and 2022 by Advance HE noted this, for example, '*There is clear evidence that the student voice and student engagement is valued by the university and specifically the Board. Indeed, a number of Board members spoke positively about the extent to which there is a clear commitment to the student experience from the university*' (Advance HE, 2018). Student feedback provides further evidence of our success in engagement. For example, except in the pandemic year of 2021, our benchmarked NSS scores for student voice are very strong.

32. However, there is a limit in the extent to which these representative and feedback mechanisms can reflect all students' experiences. We are therefore innovating in the application of person-centred design techniques to improve student experience. For example, we commissioned observational research to improve our understanding of how students access services. The aim was to make our services more intuitive to navigate and our response to student needs more effective. We are using this to create a new way to triage enquiries, including an improved experience for online live chat. Person-centred design allows us to realise co-development with students in a much more

meaningful way than other approaches we have used. Feedback from students and staff involved in design workshops (para 62) has been very positive and students say they have enjoyed having a larger role in the design process: *'I am grateful for the chance to have been a part of your team today. There was so much to learn. For the opportunity to also be amongst staff at work.'*

2.2.1   Transition and engagement

33.   Student engagement begins before students join the University. We design and manage successful student transition to higher education around the premise that students need to know what to expect, how to navigate the experience, and where to go for support. We also give a lot of consideration to how students might be feeling, and design experiences to foster a sense of belonging and celebrate their arrival, so that they feel confident and excited to start their university life. For example, we developed a programme focusing on belonging, community building and developing agency and resilience with Grit Breakthrough. This organisation has a track record of delivering transformational coaching in other contexts and we were one of the first universities to work with them. Our programme is embedded into our Welcome activities and evaluation included a survey of students in 2019/20 (n=1292). A clear majority reported that the workshops were useful. Students from POLAR4 quintile 1 and 2 backgrounds provided a higher-than-average positive response (+ 7 percentage points). Overall, students reported improvements in their sense of community, agency, and awareness of support. We have refined the programme since. A student on the 2021 programme commented: "*It's…an open space for everyone to feel validated… Highly interactive and enjoyable, it's an amazing opportunity to think deeper about yourself and what you want to achieve.*"

34.   We also provide a trained student mentor for every first-year undergraduate. These mentors have a crucial role in supporting students throughout the first term, with a combination of social and academic activities. In term two, mentors invite students to reflect on their progress and identify plans for the remainder of the year. An evaluation of the first year of the scheme in 2018/19 found improved rates of continuation into the second year, averaging at 2.4 percentage points higher across the institution, and that widening participation students particularly benefited.

2.2.2   Teaching, feedback and assessment

35.   Well designed and implemented learning, teaching and assessment are fundamental to an excellent student experience, and these are areas for which our students report high satisfaction – as evidenced in our NSS TEF metrics. Across our course portfolio, we seek to develop graduates who are highly sought after by employers, and who are inspired to continue to learn throughout their lives. Learning and teaching is framed to develop students' intellectual agility, initiative, creativity, and collaboration, as well as technical and academic expertise. Studying at NTU should be a transformational experience for every student, providing opportunities for accomplishment in their life and career. The foundations of this are extensive use of experiential and active collaborative learning.

> **Case study: active collaborative learning**
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> We began to adopt SCALE-UP in 2012 – this is a studio-based, highly collaborative pedagogic approach – because there was evidence that it improved learning outcomes, it provided a good introduction to enquiry-based learning, and was scaled for use with large cohorts. A multi-institutional research project funded by the OfS between 2017 and 2019 demonstrated that the use of SCALE-UP is associated with reduced progression gaps, reduced attainment gaps, improvements in attendance and improvements in engagement (McNeil et al 2020). At that point, over half of our undergraduate courses were using SCALE-UP in at least one module. We have expanded adoption to the point where SCALE-

UP is now an NTU signature pedagogy, embedded into the learning and teaching across the University's courses. We have invested in technology and estate to expand the provision of SCALE-UP learning environments, and in staff development to support colleagues to adopt the pedagogy. In the pandemic lockdown, we devised an online version of SCALE-UP, so that we could maintain the same principles of collaborative learning in a virtual environment. Recognising the success of SCALE-UP, we are investing in developing further models of this type, such as Team Based Learning.

36.   Given our career focus, we prioritise engagement with employers to design and deliver the curriculum. Employers, often NTU alumni, are routinely involved in working with students, in presentations, setting assessment briefs and problem-based challenges, design shows, and networking events. This is invaluable in bringing the workplace into the course, enabling students to develop skills and apply these in work-like contexts. During the pandemic, we discovered that using online collaboration tools gave us new ways to engage a wider range of industry practitioners in taught sessions, projects, and student consultancies. A review of our COVID response for the Board of Governors (NTU, 2021b) highlighted this as one of the innovations we would retain.

37.   An illustration of how this career focus shapes what and how we teach is *CoLab*. Integrated throughout the curriculum in the Nottingham School of Art & Design, *CoLab* brings undergraduates together across subject specialisms, and with students from universities in India, China and North America. They work on projects set by industry partners. Students learn to work successfully in multidisciplinary teams, expand their creativity and practice, and develop the skills needed to be a stand-out professional in industry. At the same time, they build networks and enhance their social and cultural capital. Another example is ensuring all our students have excellent digital skills. Much of this is embedded in the curriculum, with additional, extra-curricular opportunities led by our digital technologies professionals. A discovery project with 1,518 students in 2021 informed our longer-term digital skills programme and the baseline for how we measure student digital skills. This is now one of the Board of Governors' strategic KPIs. New projects on enhancing course-based digital skills are also underway, prioritising the skills students need to study, be safe online, and to be well-equipped for a range of professional environments.

38.   Assessment is another area where we have focussed sustained effort for over a decade. Consequently, our NSS TEF indicators for assessment and feedback are consistently and materially above benchmark, even during the pandemic. In addition to a mature framework for quality and standards, we have invested in substantial educational development in assessment and feedback, moving to a grade-based framework underpinned by assessment matrices and a whole-course approach to assessment design. Analysis of external examiners reports over the last four years demonstrates that they overwhelmingly confirm that our assessment processes support a high quality of learning.

39.   We encourage innovation in assessment methods, with a focus on applications in workplace contexts alongside more traditional academic methods. NTU academics have worked with professional bodies in this. Our goal is to demonstrate to PSRBs that practice-based assessments are more effective than exams and essays for testing occupational skills. Examples where exams have been replaced include: work-based practicals in business; formative employer and stakeholder feedback on reports in architecture and building; online mooting; problem-based case studies in biomedical sciences; knowledge exchange with employers in land-based subjects; and industry challenges in psychology. This work was presented at a national PSRB forum in 2022.

40. We also innovate in assessment policy, improving the degree algorithm so that it is transparent to students and removes the need for convoluted borderline conventions (straightforwardly, a student is awarded a first if they have a first-class grade in most of their modules). We moved to a 'linear' system of numbers that stand in for each grade (0–16), because we found that the more common 0–100 non-linear system created unfair advantage for some students, due to the inflationary effects of the '70–100' first-class range. Adherence to our principle of 'do the right thing' meant that we could not leave this matter unaddressed once discovered.

41. As we have diversified types of qualification we provide, notably apprenticeships, we have ensured that the student experience offer works well in different learning contexts. Although apprenticeships are governed through the University's mature quality assurance framework, there is dedicated management of this provision at institutional and school level; this has allowed us to develop expertise in designing and delivering these qualifications. For example, course approval has been adapted to ensure that apprenticeships are designed to meet the distinct needs of learners and employers, ensuring that the learning outcomes of the award are mapped to the knowledge, skills and behaviours of the apprenticeship standard. This ensures that learning, teaching, and assessment methods are well aligned to the professional learning context. The success of this is evident in the achievement of our apprentices in the external end-point assessment. The current average achievement rate across all NTU apprenticeship programmes is 71.5%, higher than the national average of 51.8%. Similarly, our internal data show that 76% of NTU apprentices achieve a merit or distinction grade in the end-point assessment. Our NSS TEF metrics for apprenticeships provide further evidence for our success in adapting to different modes of study.

2.2.3 *Learning environment*

42. Our goal is to provide a wealth of opportunities for our students, alongside a high level of support for them to take these up. Integral to this is the creation of a physical environment that enhances learning and personal development. Our strategy for the estate is to prioritise high-quality spaces for active learning, enquiry and application, plus a variety of types of informal spaces to encourage social learning. Our commitment to active collaborative learning has transformed our teaching spaces in the last decade, as we have expanded the provision of purpose-built SCALE-UP and other active learning environments across our campuses.

43. We have made significant investment in the estate, equipping us with industry standard equipment and resources. We have done this while also achieving the rank of 2nd most sustainable university in the world and 1st in the UK for sustainability Education and Research (Green Metric University World Rankings, 2022). This investment is used to ensure that students are learning in an inspiring environment that supports development of professional skills. Examples are:

- A £3.5m investment at the Mansfield Hub, to develop circa 5,000m^2 of teaching and learning facilities has allowed us to provide specialist facilities for the students there. The wards and equipment replicate the local NHS hospital. The success of this is attested by the full employment of the first cohort of Nursing Associates.
- A new £16m 3400 m^2 building for the Institute of Health and Allied Professions at Clifton campus supports students in Nursing, Paramedic Science and Public Health. Again, this provides health care environments including hospital wards, consultation and counselling rooms, and virtual reality simulation.
- Engineering students work in a new £23m facility, which supports project-based, industry focused learning, alongside research for automation in manufacturing production.
- Similarly, students in chemistry, biosciences, sport science and computing work alongside researchers in a new £13m Interdisciplinary Science and Technology Centre. This provides

> state-of-the-art laboratories, humanoid robots, and containment facilities. As an outcome, our students report that they feel very well prepared for their industry placements (2022 focus groups).

- A £5m complex at the CMG has provided students with excellent facilities for Esports production and emerging technologies for digital media, film and TV. Students learn alongside industry practitioners, using the latest equipment and software. For example, the Esports complex hosts tournaments, including the Commonwealth Games preliminaries, which give our students direct experience in running such events.

44. Investment in digital technology continues to provide new services and software for interactive and collaborative learning. Standardised facilities provide consistency for students and staff wherever they are working, and a rolling replacement plan ensures technology is up to date. Students can use personal and university equipment in classrooms, labs, studios, cafes, and group study spaces, and a laptop loan scheme ensures they have access to high-specification technology. There are over 750 presentation facilities for students to use for group study. Additional investment was made to support students during the pandemic. This included equipment for hybrid teaching spaces, additional licences for remote access to specialist software, and equipment for remote learning and teaching. We also upgraded our online learning systems with new tools: laboratory simulation software; H5P to build interactive material; software to improve accessibility; online proctoring where PSRBs mandated exams; and improved integrations between MS Teams, the main learning platform, and timetabling systems. We have used this investment to improve our flexible learning provision. Focus group feedback suggests it contributed to the restoration of our NSS Learning Resources TEF metric in 2022 to being materially above benchmark.

45. NTU libraries provide the extensive range of resources that would be expected of any university. This includes a comprehensive academic skills programme, in-curriculum development, and peer mentoring. Our library strategy is based on three priorities: personalisation, excellent study spaces, and an e-first collection. We increased the latter by 43% between 2018/19 and 2021/22, to provide almost 1.5 million e-books and over 270,000 e-serials. This approach, alongside resource list management, is to ensure that no student needs to purchase copies of items on their reading list – an important consideration for students from low-income households.

46. Our highly personalised provision for students is illustrated by the number of one-to-one academic skills appointments we provide. Between January 2022 and 2023, this was 13,000, in person or online at students' preference. We increased this provision by 53% between 2020/21 and 2021/22, because our research with second and final years indicated that they needed more support. Student testimonies describe the benefits for their learning and confidence: *'I was very unorganised…everything was put into perspective and a plan was made, [I] came away feeling so much better and calmer',* and, '*I was able to learn practical skills which I can actually use for my essays/dissertations, such as how to extract sentences from references and make bibliographies'.* Survey data indicates that around 80% of students were satisfied that their appointment had improved their understanding of the topic discussed.

47. Library staff have also developed an enhanced programme of support for students re-taking assessments during the summer, particularly for students from widening participation backgrounds. 'NTU Pass' is intended to develop students academically and socially. It helps to create a sense of community and purpose, at a time when students may be away from their peer support networks. The programme provides academic advice for assessments, skills workshops, pastoral support, disability advice, stress management, NTSU activities, employability guidance and free accommodation. In the summer of 2022, NTU Pass provided 39 workshops and 528 one-to-one tutorials. An evaluation of the 2019 pilot compared assessment outcomes for 252 of the NTU Pass

students with non-participants resitting that summer. There was a positive correlation between engagement with NTU Pass and increased rates of progression across every equality characteristic (NTU, 2020b). We see this as another manifestation of us doing the right thing.

48. Overall, our library provision is a major contributory factor to our strong outcomes in student feedback for academic support and library resources. In the NSS, our score for library resources was over ninety per cent in every year from 2015 to 2020.

49. Similarly, we provide comprehensive and award-winning services across the range of student pastoral support – faith, finance and wellbeing. As well as a support centre on every campus, to which students can self-refer or be referred, each school has at least one Student Support Adviser, working closely with students and staff. This local provision is often critical in ensuring that issues affecting a student are addressed early. Our support recognises the needs of care leavers, disabled students, estranged students and international students. We are among the first UK institutions to dedicate a resource to supporting apprentices with a disability. To give a sense of scale, our Disability and Inclusion Services, with specialist teams in Dyslexia, Autism, Physical and Sensory Disabilities and Diagnosed Mental Health Conditions, offer support for reasonable adjustments for around 7,500 students per year who have disclosed a disability.

50. Overall, our student support is characterised by active outreach. For example, in 2019/20, we launched a new campaign, beginning three months prior to enrolment, to encourage disabled students to disclose and engage with disability support. As a result, our disability disclosure rates increased by 74% between 2017/18 (3,871) and 2020/21 (6,737), higher than the national increase of 33% over the same period. The same ethos, and additional investment, has meant that mental health disclosures have increased from 1030 to 2582 over the same period, and 27% more mental health mentoring appointments were provided in 2021/22 compared to the previous year.

51. By increasing disclosure, we can encourage more students to engage with support. Taking up this support is associated with higher rates of continuation and attainment. Across 2018/19 to 2020/21 continuation for disabled students who engaged with support improved, was consistently higher than for disabled students who did not engage (by 5 percentage points in 2020/21) and was the same as, or higher than, for non-disabled students. A similar pattern was observed for students with a mental health condition who accessed specialist 1-1 mentoring (NTU, 2022c). Overall, the impact of disclosure and subsequent engagement with services is positive for students.

52. An important part of excellence in student experience and ensuring student success is actively managing student engagement. NTU was a pioneer in engagement work and the implementation of learning analytics, reflective of our principle of being bold. Our Student Dashboard provides each student with a live analysis of their engagement, and personal tutors with timely, meaningful information. Staff in pastoral and academic support roles can access the data and record notes, greatly improving our ability to provide mentoring for all students and targeted support for those most in need. This includes formal mid-term review points and interventions to help students to re-engage with their studies. Although interventions are usually one-to-one, some courses are piloting *Breakthrough Groups*, run by year tutors for students with low engagement or low grades.

53. Interventions using Dashboard data are usually a collaboration between the personal tutor and specialist support staff, although an example at institutional level provides a useful illustration of the efficacy of this systematic approach. In 2019/20, we were worried that students' engagement would suffer during the long weeks of lockdown. We therefore established an additional service, to offer coaching to all students who were showing signs of potential disengagement with their studies. A variety of approaches were used to contact these 'hard-to-reach' students. Feedback from students was positive, with comments such as, '*I started studying again and signed in more*

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often to my [virtual learning room] to finish my assignments', and, ' *[the call] made me feel protected and considered as a member of the NTU community…*', and, *'[I feel] more relaxed about university … [the call] made me less anxious… [and] more motivated to engage*'. Our evaluation shows that, where we succeeded in reaching students with signs of low engagement, the subsequent withdrawal rate was 8%, in comparison with 16% for students with low engagement who we could not reach. This success led us to continue and extend the approach. While we still strive to ensure that no students reach this point of low engagement, it nevertheless provides an improved safety net for those who do.

54. Overall, our use of the learning analytics makes a valuable contribution to how we see and monitor educational gain (Foster & Siddle, 2020). In 2019, the student engagement team was awarded a national Advance HE *Collaborative Award for Teaching Excellence* for this work.

2.2.4   *Staff professional development*

55. We have high expectations for the professional standards for teaching and support of learning. Our criteria for excellence, which also underpin our Vice-Chancellor Awards, are that teaching must create memorable, positive learning experiences, catalyse change for our students, and that staff must embody their discipline or profession. We support this with a substantial professional development programme, action research and scholarship, and a collaborative approach to course design, in addition to our mature procedures for quality monitoring and review. Several features of our professional development for learning and teaching are highlighted below.

56. Requirements for initial and continuing professional development are articulated in the University's *Learning and teaching professional development policy*. All new lecturers must hold or attain Fellowship with Advance HE, supported through our accredited Professional Recognition Scheme or through completion of the PG Cert Learning and Teaching in Higher Education. Additionally, a short course introduces new staff to the context for teaching or supporting learning at NTU.

57. Since 2018, our PGCert in Learning and Teaching in Higher Education has been delivered as an apprenticeship. NTU was one of the pioneers in using this approach. The award is aligned to the UK Academic Professional Apprenticeship (APA) Standard as well as the UK Professional Standards for Teaching and Supporting Learning in HE. This has helped us greatly in developing more academics' understanding of what makes for a successful apprenticeship. A revalidated course commenced in February 2021, and this has an outstanding track record, with 23 out of 29 End Point Assessments submitted to date graded at Distinction by Advance HE, making NTU the provider with the highest number of distinctions in 2021/22. Colleagues report that they believe the course has benefited the experience of their own students. Our podcast for the National Teaching Repository about the APA has been streamed over 500 times so far.

58. Continuing development is supported and encouraged by a diversity of mechanisms (mentoring, short courses, collaborative scholarship, funding, awards) which allow individuals to build their own pathway. One indicator of success is that NTU has remained above benchmark and sector averages for the last five years for the percentage of academics with Fellowship (Advance HE data). Currently, 1573 NTU staff hold one of the Fellowship categories. Additionally, a campaign to support Associate Fellowship means that, increasingly, this is held by colleagues who support teaching, such as technicians and educational developers. NTU has also signed the Technician Commitment, which aims to ensure recognition and career development for these colleagues.

59. The University provides extensive development for staff aligned to strategic themes for learning, teaching, and assessment. The current programme includes: addressing educational inequalities; apprenticeships and HTQs; assessment and feedback; coaching for personal tutors; curriculum design; SCALE-UP; student engagement; Team-Based Learning; and measuring impact and

evaluation. Sessions on these themes are provided year-round and supplemented by further support where needed.

60. Student feedback influences this programme. For example, a coaching skills programme was introduced as a result of a University-wide study of student experiences of personal tutoring. One hundred staff were selected for a *Coaching Skills for Personal Tutors* course in 2018/19, the first year of the programme. Following completion of the course, 73% reported that they thought that using a coaching approach would help their students develop useful skills for their lives as well as their degrees. Staff confidence in tutoring improved after taking the course (43% felt confident before, 73% after). To date, 565 academics have taken part in this programme to improve personal tutoring. Another example is an outcome of our longitudinal *Student 2025* study (para 79). Student participants with caring responsibilities identified challenges in making friends at NTU, and, in response, we have launched a new staff programme on enhancing community in the classroom.

61. Overall, staff development at NTU is characterised by a spirit of curiosity and collaboration. This is exemplified by the Trent Institution of Learning and Teaching (TILT), a community open to all NTU staff who teach or who support learning. In TILT, staff collaborate institution-wide to share innovative practice, investigate emerging themes in learning and teaching, and recognise inspirational teaching. Funding is available for sabbaticals, start-up projects, staff/student research collaboration, and, from 2022, a student-staff co-creation scheme led by students to develop lifewide learning. The latter, in which students make a proposal and work with staff to research and implement it, funded two projects this year. A programme of practitioner-led events culminates in the Annual Learning and Teaching Conference. During the first lockdown, colleagues moved swiftly to create *TILTOnline*. Staff report that this helped them greatly during the pandemic. It proved so popular that we have retained it, and it has grown into a rich, vibrant online community with 970 members. A regular programme of *TILTOnline* workshops and talks complements the return to in-person engagement.

62. Another important way in which we support colleagues' professional development is our course design process. We have developed this from a more traditional development and approval method to one based on design thinking and sprints, using multi-professional teams that include students, external academics, employers, PSRBs, and learning designers. This is in recognition that our educational context has become more complex, such that academic subject experts cannot be expected to design a successful course alone. In this way, we ensure that NTU courses support the diversity of students' needs, and meet academic, industry and accreditation standards.

63. This new approach was inspired by our participation in the national Teaching Excellence Alliance, for which we hosted the first multi-team course design competition. Our approach, conceived in 2019, uses design sprint methodology and student personas to focus on the student experience first, before developing course content. Student design team members are recruited from diverse backgrounds and receive training to ensure they have the confidence to participate fully. The design team identifies measures to support student learning from enrolment to graduation. They ensure the course curriculum is stimulating and that it will prepare students for graduate employment or study.

64. The first sprints were run in 2020 and so we do not yet have a full evaluation, nor will this impact on the TEF review period. However, we have included this summary as an illustration of our approach to student experience. Feedback from course teams to date has indicated that this process transformed the way they approached curriculum design, with the final course being quite different from their early ideas.

65. Finally on professional development, we have adopted a rigorous approach to colleague appraisal which in 2022 saw over 95% of eligible staff having their objectives and development recorded. Mid- and end-of-year reviews help embed ongoing dialogue about individuals' roles in delivering the University's strategy and the importance of professional development to support that.

2.3 How we know our approach works

66. Overall, student feedback – including our NSS TEF metrics – supports the case that we are succeeding in creating an excellent student experience, for and with our students and across our range of provision. Where shortcomings are identified, for example among students with caring responsibilities (para 60), they are positively addressed. In NSS, final years cite the most positive aspects of their experience as related to the teaching and their course. They value the contact they have with staff, and the support provided; they also appreciate that staff are approachable, knowledgeable, and passionate about what they teach. In NSS open comments, NTU students say they value the practicals, labs and field trips in their courses, and find their courses interesting and relevant (Seymour Research Ltd, 2022). We also know from NSS open comments what our students would improve about their university experience. These are generally assessment and feedback related factors; for example, students would like feedback to consistently include a higher level of detail. Therefore, although we are consistently one of the best in the sector against benchmark for this aspect of the NSS, there is always scope to enhance our assessment and feedback practice.

67. Our own research with students provides a picture of an institution that provides a wealth of opportunities and guidance for development. We have been making comparisons between pandemic and pre-pandemic years, to monitor carefully how students' experience continues to evolve and therefore how our provision must also evolve.

- *Transition to higher education.* 85% of students reported satisfied with the NTU Welcome in 2022. There were increases in reported benefits of the Welcome Workshops, compared with the previous two years and the pre-pandemic year of 2019. Seven out of ten students reported feeling part of the NTU community already, with their greatest sense of belonging being to the University and their course. Data from our longitudinal study, *Student 2025,* indicates that 77% of that cohort thought that the Welcome experience had helped them settle into university life.

- *First year belonging and engagement.* Measures relating to belonging, enjoying being at university, satisfaction with their experience so far, confidence, motivation, and other aspects of being a university student, have recovered to pre-pandemic levels. Engagement with studies, extracurricular activities, student support services and social life has increased in comparison to 2021/22.

- *Second and final year students.* Returners in 2022/23, particularly second years, reported lower satisfaction, advocacy, and sense of belonging than new students. They were most worried about coping with their workload, finances, and meeting deadlines. They wanted more re-induction sessions outlining expectations for the year ahead, and more opportunity to meet peers and staff before classes started. These are new themes, post-pandemic, and we will enhance activity for returning students accordingly.

3. Student Outcomes

3.1 Our goals and approach for student outcomes

68. In using education to improve social mobility and launch careers, our goal is to create an environment within which all students can learn and demonstrate what they have learnt. This includes ensuring epistemic access to higher education as well as functional access, and

addressing barriers to success, wherever we can influence these. Two main themes for the approach to student success at NTU are our work to address social inequalities and how these manifest in our educational context, and our conception of educational gain.

69. We take an evidence-based approach to developing student outcomes, as for student experience. For example, students complete a career readiness survey at enrolment each year, where they are asked about their career plans and work experience. This is used to inform curriculum development and support for individual students, such as additional career education sessions. We have developed a student employability engagement tracker, which logs student participation in curricular and extra-curricular activities, enabling us to improve targeting of support. Analyses of labour market trends are discussed with schools to inform reviews of their portfolio. This has led to widespread curricular change, for example, the shift from more traditional chemistry and physics courses to those focussed on future workforce needs such as forensic chemistry and medical physics, and emphasis on digital design in product design courses.

70. We test our governance of student outcomes in several ways, including annual assurance and periodic reviews, and internal and external audits. Our Board of Governors has a dedicated subcommittee, the Academic Assurance and Regulation Committee, for scrutiny of student outcomes and compliance with regulation, both at NTU and collaborative partners. A review of the effectiveness of our Board of Governors by Advance HE in 2022 concluded that, '*the approach to the oversight of academic quality at NTU is very good. There has been a proactive move to ensure that issues relating to learning, teaching and research are woven into the schedule of business for the year, coupled with pre-Board presentations and golden thread discussions.*'

71. Overall, student outcomes are managed within our mature framework for academic standards and quality. However, because of our educational mission and the diversity of our student body, we face significant challenges in ensuring all students achieve. The pandemic has thrown social inequalities into even sharper relief. A significant element of our approach to student outcomes is focussed on addressing these inequalities, and the effects they have for student academic and employment outcomes. As our TEF Student Outcomes metrics show, and as discussed in the following sections, we are making progress in addressing inequalities but recognise that more remains to be done. We give a range of examples in this submission of differential performance and our work to meet our ambitions for reducing inequalities in student outcomes.

3.2.1 Success for All

72. For over a decade, we have pursued a significant programme of work, known as Success for All (SfA) to address the effects of social inequalities on student outcomes. This began when we were first able to generate analyses of outcomes by equality characteristics. It was first seen in annual quality monitoring, but for some time has also been governed by our SfA Steering Group, chaired by the Vice-Chancellor. Furthermore, 'Success for All' as a concept reaches far beyond the membership of committees and is embedded in the culture of all schools and professional services.

73. Success for All has a dual approach. We seek to address the structural and cultural issues that contribute to our outcome gaps and, at the same time, deliver interventions to support students. The goal is fully embedded in the course design and extra-curricular activities and is a key performance measure from board level to school and course reviews. Our target for the degree outcomes gap between black and white students is a Board of Governors' strategic KPI. Schools and professional services produce five-year plans to address outcomes gaps, expressed as Theories of Change. These exist as live documents, with regular review and monitoring. We have developed the sophistication of our analysis as well as the planning, delivery, and evaluation of

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resulting action. In the last four years, we have conducted work on the role of extra-curricular activities in student success, the impact of placements on student outcomes, and on disparities in continuation and outcomes for black students and students who entered with BTEC qualifications. We have also made significant investment in staff development to increase institutional capacity to use Theory of Change and impact evaluation. This work has fed into improvements made to our provision, from course design to student support to extra-curricular activities.

74. To evaluate this work, in addition to the seven targets in our OfS Access and Participation Plan (APP), we have thirteen further targets, in recognition that, while the APP focusses on the widest gaps, we want and need to address all inequalities in outcomes. Our trend data for these gaps demonstrate just how profound the adverse effects of the pandemic and cost of living crisis continue to be for disadvantaged students. In November 2021, we reported that we had met or exceeded 11 of our 20 targets and the trajectory over several years was positive for many targets which had not been met. After this period of trending improvement, in November 2022 we met or exceeded 5 targets and 13 had widened. Even allowing for the spiky data in annual reporting, this reversal of the positive trend requires renewed energy around current approaches and creation of new ones, especially interventions that will focus on specific target groups.

75. The scope of Success for All is institutional and the scale of activity significant. Two examples are therefore provided to illustrate our approach.

76. The first is our work to close the gap in degree outcomes between black and white undergraduates, both a strategic KPI and a target in our Access and Participation Plan. The measure is expressed as the percentage gap between UK domiciled black and white students who are awarded a First or 2:1 degree. In 2021/22, this was 26 percentage points, greater than the sector average, although closer to that for similar institutions. Our target for 2025 is to reach 6 percentage points. Despite the University committing significant resource and attention over the last decade to address this gap, it remains a concerning and challenging target. We have largely used non-targeted, inclusive approaches, based on research evidence. However, part of the challenge, as reported nationally by TASO in 2020, is 'a lack of causal evidence as to what works to narrow…gaps in student success outcomes, particularly relating to racial equality gaps'.

77. We undertook an institutional review for the Board of Governors in autumn 2022, concluding that we have paid insufficient attention to intersectionality in addressing this gap. Our success in reducing gaps for ethnicities other than black heritage suggested that these gaps should not be seen only in terms of ethnicity. Our analysis confirmed that multiple, interacting factors are associated with the black/white degree outcomes gap, and that ethnicity remains an influential factor on its own. Figures from 2017/18 to 2021/22 show the compounding effect of these factors on degree outcomes (Table 2. For contrast, 66% of black female students who entered with A levels were awarded a First/2:1).

Table 2: Multiple factors in degree outcomes 2017/18 to 2021/22

Factors	Awarded 1st/2:1
Black students	54%
Black, Male students	49%
Black, Male, Clearing students	44%
Black, Male, BTEC students	30%

78. Based on this investigation, we have changed our approach to addressing this gap. We are using a much more targeted approach. Half of black students at NTU do achieve a First/2:1. We are therefore assessing the circumstances of this group that are not the same as for the other half, in terms of intersectionality and course context. This work is being undertaken with twelve of our

courses, on which 39% of our black student population is studying. We will use this work to advance a wider, improved Theory of Change for closing the black-white degree outcomes gap. Using the same twelve courses, we will also model the effects of structural features on the black/white degree outcomes gap. This includes the potential impact of course structures; module features; assessment types and patterns; and policies and their operation. We are testing the effect of changes for each course, alongside further work with the course teams to discover other explanations for the gap.

79. The second example illustrates our qualitative research on student outcomes. _Student 2025_ began in 2021, having been delayed by the pandemic. This is a longitudinal project following 100 undergraduates, across all schools, who enrolled in the first year in September 2021. The project explores academic and social experiences across a sample of 90 students from Access and Participation Plan target groups (black students; students from low-participation postcodes; students from low quintiles for Indices of Multiple Deprivation) and 10 students from comparison groups**.** The aim of the project is to improve our understanding of how student experience may influence disparities in outcomes, providing in-depth qualitative data to integrate with and inform our quantitative data.

80. The project has completed its first year. Initial findings from interviews and surveys described how the students had made friendships and how they thought about their success at university. Mean scores for belonging, engagement and experience were positive and slightly higher than sector averages published in the Wonkhe/Pearson report of 2022. Just over half of participants already had a part-time job in the first term, and 36% were engaging with extra-curricular activities. Just over half had accessed support in the first term, with the most-commonly cited sources being Student Support Services, personal tutors, libraries and academic staff. When asked whether they had any support from outside NTU, 78% said they did not. These early insights generated by _Student 2025_ are already informing our approach to developing a sense of community in the classroom, which we are sharing through TILT (para 61). The project will, ultimately, generate situated and strategic recommendations to address disparities in student outcomes.

81. We recognise that we have differential Student Outcomes performance for some study modes, student groups, and subjects. Our continuation, completion, and progression metrics for full-time UG students are in-line with benchmarks overall. This achievement is replicated across almost all split categories for continuation and completion. A group which lies outside this positive completion picture is non-UK domiciled students, one of our Success for All target groups. These students are based mostly in business, science, and art and design subjects. The largest single group (approximately 40%) progress from our partner, Nottingham Trent International College (NTIC). We have approached this challenge by improving the alignment of progression routes with NTIC and improving provision for induction and student mentoring. An evaluation by NTU Global in 2020/21 found that 93% (N = 130) of students surveyed were satisfied with the new tailored induction programme. In 2022, we undertook a five-year analysis of continuation and completion for non-UK students to understand this issue further. It is clear from this analysis that non-UK student success is related to prior attainment and their route into NTU. We are using this insight to tailor transition support further and continue to explore whether there are structures associated with the final stages of courses which may be adversely impacting non-UK students.

82. For progression among full-time students, the principal variation is seen across subject areas with most in-line, some materially above and a similar number materially below their benchmark. The latter subjects, however, have higher proportions of those with negative progression outcomes who undertook interim study than those above benchmark, suggesting that graduates are later to the employment market in those subjects. Due to the timeframe, outcomes metrics for apprentices are

largely unavailable. However, the TEF Continuation metric for these students indicates it is in line with the benchmark.

83. Our outcomes metrics for part-time students range from materially above benchmark (completion), in-line (progression) to materially below benchmark (continuation). The challenges for these are context-specific and so require different approaches to address. For example, we have a small number of part-time undergraduates, who are predominantly studying professional nursing-related courses. This is dedicated part-time provision developed in collaboration with the NUH NHS Trust. Students on these courses are registered health practitioners working in health or social care and seeking to develop their career and skills by studying alongside their employment. We have seen a concerning increase in the non-continuation rate of students on these courses. This is a result of wellbeing concerns arising from the COVID pandemic, which has put an enormous strain on clinical practitioners, placing additional stress and burden on our students in their clinical roles. We have also noted an increase in the number of students changing roles or leaving the NHS and as a result no longer meeting the requirements for their professional course and withdrawing. To address these issues, we have agreed with students and their employer that they could pause their studies where this would lessen their stress. Although this means that the overall number of nursing students on a break in study has increased, we believe this decision is in the best interest of the students themselves.

84. Work to improve graduate outcomes for all students is an institutional priority. For example, our Board of Governors has a strategic KPI based on the Graduate Outcomes survey metric for skills utilisation. As described in our provider context (para 18), new courses are approved only if there is a strong case that graduates will secure highly skilled roles. Our course design sprints include employability experts in the design team, to ensure that we consider graduate outcomes at that stage. Our extensive employability support is described in paragraphs 94 to 100. Additionally, in 2022, we appointed an Executive Dean for Graduate Outcomes. This is a new role at the University and, we believe, in the sector, providing strategic leadership to progress good graduate outcomes for all NTU students, inclusive of graduate employment, wellbeing, quality of life, and social mobility.

3.2.2 Educational gain

85. In describing our context as a provider, we noted that our conception of educational gain is more than just degree outcomes (para 5). Rather it is about rounded, whole-person development that extends to developing social and cultural capital.

86. We are determined to give our students whatever it is they need to succeed. We achieve this through the design of our courses, co- and extra-curricular provision, and our support. For example, our STEM students tell us that we prepare them well for their placements: *'I was there with a few from the Uni of —— and they had barely seen some of the instruments! We have had a lot of experience compared to others from —— universities and I hadn't realised that before'* (NTU, 2022b). Our students in Architecture and Law practise how to network at informal events with industry partners. Students on our new Black Leadership Programme developed their confidence and also achieved higher rates of 1st or 2:1 grades in 2021/20 comparison with other black heritage students in the same year (61% compared to 34%) (NTU, 2020d).

87. Although we do not yet have a good measure for educational gain as rounded development, we do generate evidence to gauge the efficacy of our approach.

88. In our Success for All research, we have demonstrated an association between participation in extra-curricular activities (ECAs) and improved student outcomes (NTU, 2020c). At NTU, as for the sector, this has also been shown to ameliorate socio-economic and demographic disadvantage. In

2021, we published a paper (Kerrigan & Manktelow, 2021) based on nine of our extra-curricular interventions over several years, beginning in 2014/15. For all nine ECAs there was very strong evidence of a positive association between participation and higher attainment, with the greater effect sizes apparent in three: SPUR (Scholarship Projects for Undergraduate Researchers para 91); student mentors for engagement and retention; and the multiple award-winning NLS Legal (students provide *pro bono* advice for Nottingham citizens). It is therefore our assumption that increasing engagement in specific activities for those students who may not typically access them is likely to improve their outcomes, at university and beyond.

89. However, there are barriers to participation in these activities, with finance being one of the most significant. For many years we have provided bursaries associated with given activities and we are building on this to provide an *Opportunity Bursary* from 2023/24. This will be a guaranteed annual sum to support low-income students' engagement in extra-curricular activity.

90. Another barrier is confidence. Our Grit intervention (para 33) seeks to improve student outcomes through increasing individuals' self-efficacy, the belief in one's ability to reach goals and overcome problems. This was trialled first in 2017/18, and an impact evaluation (N=417) conducted (NTU, 2018). The intervention had a positive effect on aspects of students' self-efficacy which was both short- and medium-term. Progression rates were shown to be significantly higher for Grit participants than for their non-participating peers. Overall, attendance at Grit was associated with higher rates of continuation, with 84.8% of participants progressing to the next level of study, compared with 72.3% overall. Increased attainment, as measured by level grades, was evidenced overall and for most groups, and was statistically significant for BAME students and students of no known disability. Students who participated in Grit showed a statistically significant difference in engagement scores from term 1 to term 2 and term 3, compared with their non-participating peers.

91. The Grit work is an example of where we have adopted one, institutional approach to whole-person development. It is for all students, implemented in the same way across the University. In other cases, our approach needs to be adapted for disciplinary contexts or for different student groups. Some schemes work best in-curriculum, others as co-curricular options, and still others as extra-curricular actives tailored for different groups. Overall, however, we seek to ensure that all students can benefit. For example, providers of extra-curricular activities for the Success for All programme must demonstrate participation by equality target groups and provide impact assessments. The following are examples of context-sensitive approaches to whole-person development:

- All undergraduates in Nottingham Business School take the module, *Personal and Academic Development* (6475 students in 2022/23). Students learn to recognise their skills, behaviours and attributes, and formulate a continuous professional development (CPD) plan to develop these to achieve their ambitions. Students are exposed to a vibrant digest of CPD activities, including national and international business challenges and competitions, field trips, Alumni Fellow guidance, a Business Leaders' lecture series, and a variety of workshops.

- Collaborative Online International Learning (COIL) is a form of virtual student exchange between NTU and our partner universities, with applications in many disciplines. It allows students to collaborate with students from different subject specialisms, or with students from other universities in countries such as India, China or North America. They work on projects set by charities or industry partners. Each collaboration aligns to one of four pillars: social justice; regeneration and sustainability; innovation and entrepreneurship; or community.

- Sustainability in Practice (SiP) is embedded into courses across NTU, as well as offered to all students as a stand-alone self-study module. Over the last three years, there have been 3060 course events and 1134 independent events. Upon successful completion, participants receive certification of their achievement in addition to their Higher Education Achievement Report,

highlighting their sustainability knowledge to employers. SiP is also part of a 36-hour Sustainability Game Jam, bringing students from many disciplines together, and a bridging module for students at our partner institution in Taiwan.

- Students at Nottingham Law School gain practical experience by providing free legal advice to local individuals and organisations, via NLS Legal. They are supervised by experienced lawyers working at the firm. NLS Legal was the first teaching law firm of its kind in the country to be regulated by the Solicitors Regulation Authority, and works closely with local firms, advice agencies and voluntary sector organisations. In 2021/22 over 600 law students were involved in pro bono work at NLS Legal, in almost 200 cases. Ninety-six per cent of the students who worked with NLS Legal achieved a First Class or 2:1 degree, compared with 70.8% across the whole law cohort.

- Scholarship Projects for Undergraduate Researchers (SPUR) has run for over a decade and is well-embedded in NTU culture, with many spin-off schemes (SPURx). Students work within research teams on projects that develop new knowledge, inform the curriculum, and produce outputs, including peer reviewed publications. SPUR students report increased confidence, knowledge and skills. The scheme attracts a high proportion of widening participation students and, overall, is associated with improved degree outcomes. Over the last four years, there have been over 250 projects, involving one or more students in each.

- NTU Volunteering provides a programme aligned to subject disciplines. We recognise the positive impact that engaging with local communities can have on a student's development and subsequently on their attainment. Prior to the pandemic, over 60,000 hours of volunteering took place. Additionally, Community Engaged Learning (CEL) incorporates projects within the curriculum, whereby students work on group projects with community organisations. There are currently 12 CEL modules across 4 schools with over 30 organisations supplying briefs for projects.

- Curated & Created supports students to get involved in a wide range of extra-curricular cultural activities to support their sense of belonging and development of social and cultural capital. This includes music tuition and performance, writing, workshops, drama and exhibitions. The programme is designed to engage a diversity of students. For example, 750 students participated in the WRAP writing programme in 2020/21, of whom 58% were from low-income households.

- In partnership with the Equality and Diversity team, NTU Sport commissioned research to explore barriers BAME students face when accessing sport (NTU, 2022d). The *Changing Perceptions* project had three aims: understand perceptions and experience of NTU Sport from the perspective of BAME students; identify the barriers and potential barriers to accessing NTU Sport faced by previous, current and potential members of NTU Sport; and make recommendations to improve the perception and experience of NTU Sport. Engagement data indicate that changes made as part of *Changing Perceptions* have contributed to an increase in BAME student participation in all NTU Sport programmes. An additional 1,456 BME students participated from 2020/2021 to 2021/2022.

92. Educational gain for apprentices has a different emphasis, albeit the same goal of rounded development. Apprentices have access to the same NTU and NTSU resources as other undergraduates. However, apprenticeship courses are also designed to make the most of the work-based context. For example, all Chartered Manager apprentices undertake a project week which involves several social action projects. They liaise with local community groups to support them with business planning, fundraising, and other volunteering activities, such as within local community gardens. Apprentices also complete the NTU Sustainability in Practice certificate during

this week. In our Paramedic Degree Apprenticeship, we build in work placements outside the context of the student's employer, for example in A&E or a maternity department to gain additional experience. Bioscience apprentices visit the IBMS Congress (PSRB national conference) to liaise with laboratory professionals and suppliers. They work on real-life case studies from practising scientists to build a professional identity and highlight the impact biomedical scientists have on patient care. Our apprentices have received recognition for the quality of their work. In   , two NTU apprentices were placed winner and runner up in the category of Apprentice of the Year at the East Midlands Apprentice of the Year awards. At the   Derbyshire and Nottinghamshire Apprenticeship Awards, NTU apprentices won the Higher and Degree Apprentice of the Year award, and the Apprentice of the Year in Engineering, Manufacturing and Construction award. These awards are based on employer nominations for the value apprentices add to the workplace.

93. Employability is important for social mobility and career development and central to our conception of education gain. Most of our students cite career as their main motivation to go to university. In short, our graduates' successes are very important to us. However, we face challenges in supporting all our students to succeed. Many are from disadvantaged backgrounds. Our local region, the East Midlands, has significant economic and social challenges. Our approach, therefore, has two broad elements.

94. First, we work with employers and professional bodies to provide the right courses. As described in paragraph 18, we develop our vocationally focussed portfolio by ensuring that new courses are approved only if there is a strong case that they will lead to jobs in Standard Occupational Classification (SOC) categories 1–3. For existing courses, failure to meet a threshold for graduate employment triggers escalating interventions, culminating in complete revision or withdrawal.

95. For all courses, we emphasise experiential and active learning. We have revised the undergraduate portfolio to include careers guidance and assessed work experience as core components. This was established in a whole curriculum refresh in 2016, and we continue to enhance implementation, ensuring that it is high quality and benefits all students. In summary, every undergraduate now undertakes at least 240 hours of work experience as an assessed part of their course, with embedded career planning skills development. The timescale for the Graduate Outcomes survey means that these developments were either not in place or in their infancy for the cohorts reflected in the TEF metrics. However, based on NTU and sector evidence of their importance, we anticipate they will further improve our students' outcomes.

96. Work experience is complemented with careers education guidance within the curriculum, whereby careers consultants deliver sessions and support academics, for example with an Employability Teaching Toolkit. This embedded approach is proving central in developing students' appreciation of transferrable skills. For example, data from *Student 2025* indicate that students recognise that self-responsibility, time management, and networking are all influential in enabling them to demonstrate an 'employable skillset'.

97. Undertaking a placement and engagement with employability services is associated with improved continuation, completion, and attainment at NTU (NTU, 2019d; Kerrigan, Manktelow, Simmons, 2018). Evidence generated for our Success for All programme also shows that this is the case for students sharing characteristics targeted in our Access and Participation Plan, including Black/Black British students, students from low participation areas (POLAR4), and students from deprived areas (IMD 2019).

- *Academic progression*. Students who engaged with employability services were twice as likely to progress to the next level of study than those who did not engage.

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- *Attainment.* Engagement with employability was associated with higher academic grades than those who did not engage. Completing one or more placements was also associated with higher academic grades. The length of the placement was not a significant factor.
- *Upper degree outcomes.* Students who engaged with employability services were 1.7 times more likely to achieve a first or 2:1 classification than those who did not engage. Students who completed placements of between 131 and 365 days (sandwich placements) were 3.5 times more likely to receive upper degree outcomes than those who did not.

98. The evidence for a positive association between work experience and improved degree outcomes at NTU and nationally (TASO 2020) makes it especially important to ensure that students from widening participation backgrounds can take up placements. We seek to ensure that all students can benefit. Without support, NTU students from low-income households apply for fewer placements than their more advantaged peers, and demonstrate lower persistence in their search (Kerrigan, Manktelow, & Simmons, 2018). One of our interventions to support them is Rise PLAN, which combines a bursary with a programme in the second year to build confidence and resilience, develop commercial awareness, and provide the skills to succeed in recruitment processes. The first cohort to benefit were the students who graduated in 2019/20, and for whom we now have Graduate Outcomes data. These show that 83% of *Rise PLAN* graduates had secured highly skilled roles, in comparison with non-participating graduates from widening participation backgrounds, of whom 61% were in highly-skilled employment.

99. The second approach to developing educational gain in this area is that we provide individual pathways for employability development. This recognises that our students have different starting points, different contexts, and different aspirations. We have one of the largest employability services in the sector, which is also highly regarded (for example, in 2022 it was nominated for four national awards). We use this to provide a vast range of extra-curricular opportunities that we combine in different ways depending on what a student wants and needs. In this way we can work at large scale and provide personalised development for educational gain on an individual level. The approach is aided by diagnostics at each stage of a student's journey; from a career readiness survey on entry, through to a follow-up survey six months after graduation.

100. Examples of the components of this personalised offer are as follows:

- Career consultants offer considerable one-to-one guidance; in 2021/22, the team provided 15,162 appointments to students and graduates. Our online careers programmes and support has been used by 23,270 students so far this academic year. These are provided in addition to industry-focussed and subject-based careers events and fairs across our sites, with approximately 500 exhibitors.
- In addition to a large placement service, we advertise suitable part-time jobs, to provide students with more work experience, and income. In 2021/22, we advertised 5,584 of these roles. We provide many paid student opportunities within the University, such as ambassadors, mentors, finance assistants and marketing assistants (3,064 in 2021/22).
- NTU Enterprise offers a range of opportunities, programmes, resources and extensive support and coaching to help students and graduates start their own businesses. In 2021, almost 15,000 people engaged with NTU Enterprise, including students, graduates, staff and external businesses. This is a growth of 9000 over the last three years. An NTU Entrepreneurs Club based on the EntreComp EU Framework, develops students' entrepreneurial skills. There are currently 456 student members.
- We provide support for three years after graduation. Graduates are invited to complete a survey six months after they leave us, which helps to identify those who are unemployed or under-employed, and to personalise support for them. We have a 'Graduate Promise' which

guarantees a paid internship to any NTU graduate still seeking highly skilled employment a year after graduation. In 2022, just over 300 graduates benefitted from this opportunity.

101. Although we assess the efficacy of these services for students using engagement data, student and employer feedback, and careers readiness surveys, ultimately, we are seeking to increase the number of students who progress to highly skilled employment and further study. We can gauge this for the 2019/20 cohort, using Graduate Outcomes survey data. For this cohort overall, 67% were in highly skilled roles fifteen months after completion. For participants using our employability support programmes, outcomes are shown in Table 3.

Table 3: Highly skilled role outcomes for students using employability support programmes.

Programme	Summary	In highly skilled roles
Grads4Nottm	100-120 students work on an employer challenge in a multidisciplinary team for a fortnight at the end of Term 3	71%
Unitemps	c3,000 students undertake part-time casual roles at NTU	73%
Employability Award	A flexible programme in which students plan and work towards goals, build their CV, network, and interview skills.	70%

102. We believe that more recent developments to support graduate outcomes, such as universal work experience, enhanced careers support, and *Rise PLAN*, will continue to improve progression for all our students. Our TEF split metrics for progression in different equality characteristic groups indicate that we are achieving good reach across our student population and that our Success for All programme is having an impact.

4. Conclusion

103. Our knowledge of our students is gained in part from them working alongside us as partners in the creation of their higher education experience. Our commitments to enable social mobility and provide career focus are woven throughout our courses and campuses and motivate academic and professional services staff. As a result, every student who comes to NTU leaves with something more than a qualification; they possess the mettle and the confidence needed to tackle the complex problems of twenty-first century society.

104. As our student body has diversified, we have faced challenges with aspects of progression. We have brought in a range of additional measures to support our students into graduate employment or further study, based on our analysis of these challenges. These measures have been directly influenced by our principles: we change lives; we are bold; and we do the right thing.

105. Our strong student experience metrics reflect our consistent and significant investment in our academic and student support, in our estate, and in our staff. They reflect our enthusiasm for working *with* our students in the development and evolution of our courses. We will continue to build on this approach and success as we embrace further diversity of our portfolio and our student population in the years ahead.

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