

A photograph of two women, one with dark curly hair and a purple choker, and the other with brown hair, both smiling and looking at a laptop screen. They are in a bright room with large windows in the background.

Full Report: A review of the experience and impact of Studiosity in UK universities, 2017-2022

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1. Introduction

Studiosity is an online study success service that provides routine, personalised, formative feedback for students. This is delivered in partnership with schools, further education colleges and universities in Australia, New Zealand, the United Kingdom, Ireland, Dubai and Hong Kong. Studiosity connects students with academic writing and core skills Subject Specialists who provide feedback on their writing assignments and help them to work through problems in live chat sessions. These services are available to students 24/7, 365 days of the year. Studiosity was introduced to the UK in 2016/17, and now partners with 22 higher education providers (HEPs).

2. About the review

This review examines the experience of higher education institutions in the UK of partnering with Studiosity, and examines the impact, from the institutional perspective on students, staff and the university. In particular, the review addresses these questions:

1. What do HEPs partnering with Studiosity aim to achieve?
2. How have partner institutions implemented Studiosity?
3. What impact has Studiosity had on students, staff and institutions?

The review was conducted by combining evidence from a number of sources:

- Five online focus groups with 32 staff from four institutions.
- Three online one-to-one interviews with institutional managers (including senior leaders and operational managers).
- Institutional data about continuation, progression and attainment (2020/21).
- Information and data from Studiosity about student usage.
- Previous research reports about Studiosity UK.
- Wider literature and information about the experience and impact of partnering with Studiosity.

Two in-depth institutional case studies have been developed, based on interviews, staff contributions to the focus groups and institutional data, explaining how and why they partnered with Studiosity, and how students, staff and the institution have benefited. The information from the case studies and the other sources has been synthesised to address the review questions. The full case studies – MLU (Multi-disciplinary London University) and NRU (Northern Regional University) are in the appendices.

The full research report is complemented by the Summary Report (Thomas 2023a) and the Evaluation Toolkit (Thomas 2023b). The Evaluation Toolkit is based on a theory of change approach to evaluation, and provides a full-annotated evaluation framework, a blank evaluation template, guidance on how to use the framework to complete the template. The evaluation evidence can be used to understand the impact of Studiosity within your institution, and this might build the case for retaining Studiosity and expanding the students who benefit

from the services, and to provide evidence for external purposes such as your Access and Participation Plan, and Teaching Excellence Framework submission.

3. What partners want from Studiosity

The case studies, the staff focus groups, Studiosity staff and the wider literature have identified many reasons why universities and colleges choose to partner with Studiosity. In summary, what universities hope to gain from Studiosity for students can be broadly grouped into six categories:

- i. Provide services to students.
- ii. Improve student experience, satisfaction and wellbeing.
- iii. Improve student outcomes: continuation and attainment.
- iv. Close or eliminate awarding gaps between student groups.
- v. Generate evidence about student support.
- vi. Make the most of limited institutional resources.

Table 1 lists the specific reasons identified, and how they have been categorised.

Some of these reasons were related to specific student groups, such as to improve the experience of and outcomes of commuter students, or international students, and to close the attainment gaps between students from different ethnic groups¹, and between home and international students. Other reasons implicitly or explicitly relate to all student groups. Some reasons relate to changing staff roles and responsibilities. The staff discussions revealed a more extensive range of ways in which students are felt to benefit from Studiosity, which had perhaps not been anticipated when they signed up to partner with Studiosity. These are discussed below in section 6.

Table 1: Broad and specific reasons for partnering with Studiosity

Broad reasons for partnering with Studiosity	More specific reasons for partnering with Studiosity
Provide services to students	Provide support to all students. Provide writing feedback 'at scale' to a large number of students. Provide writing feedback out of hours (particularly evenings and weekends). Provide an online service available to students not on campus. Provide affordable, academic support across multiple campuses.

¹ Studiosity does not use the terms 'BAME' or 'BME', as these are unhelpful and frequently hide differences and disparities between specific ethnic groups. Some of the institutions involved in this review do however use these terms, and the data is frequently aggregated into these categories. In this report these terms have been avoided, and replaced with ethnic minorities, but BAME is used in the charts, reflecting the way in which the data was collected.

Improve student experience, satisfaction and wellbeing.	Develop students' academic skills. Develop students' confidence. Reduce student anxiety. Benefit international, first in family, commuter, mature and disabled students who struggle with the transition to HE and/or with academic writing. Develop students' understanding of academic integrity. Offer personalised support. Consistency of writing support across multiple campuses.
Improve student outcomes: continuation and attainment.	A targeted approach to improve the attainment of students from specific groups. Improve continuation rates of specific student groups.
Close or eliminate awarding gaps between student groups.	Reduce awarding gaps, particularly between students who are from minority ethnic groups and White students, and between international and home students.
Evidence about student support.	Provide evidence of supporting students and giving formative feedback. Learn more about students' writing support needs.
Make the most of limited institutional resources.	Reduce the workload of academic staff. Complement and extend the work of a small academic skills team. Free up professional service and academic development staff for more complex tasks.

The wider literature identifies some further reasons for choosing Studiosity. The University of Bedfordshire (Pike and Aruna 2022) partnered with Studiosity to improve students' writing experiences and to support students' transition into HE. In this conference paper they explain the wider goal of partnering with Studiosity to understand more about students' writing, and to use this to enhance the institutional response.

"...we opted to utilise a service which provides feedback from a writing assessor. In this way the service mirrors, supports and provides a route for us to better understand our students' writing skills and to determine how we can feed forward and back to students and a multitude of organisational layers within the University which stretch across staff and student groups". (Pike and Aruna, 2022, no pagination).

UK higher education providers in general, and English institutions in particular, are very focused on improving the student experience and outcomes, as they underpin many of the measures used by the Office for Students to regulate and assess them. For example, Condition B3 of the regulatory framework, requires that: 'The provider must deliver successful outcomes for all of its students, which are recognised and valued by employers, and/or enable further study.' The outcomes used to assess this are: a. student continuation and completion; degree outcomes, including differential outcomes for students with different characteristics; and graduate employment and, in particular, progression to professional jobs and postgraduate study. Student satisfaction, measured by the National Student Survey (NSS) and student outcomes

feed into the Teaching Excellence Framework (TEF) assessment, used to indicate teaching quality, and this data is split to indicate the satisfaction and outcomes of students by gender, age, socio-economic status (POLAR 4 and IMD) ethnicity, disability and domicile. The continuation, attainment and progression of students from target groups underpin Access and Participation Plan (APP) requirements, these must pay particular attention to the differentials between students from more and less advantaged groups (young/mature, high/low socio-economic status, White/ethnic minorities, non-disabled/disabled, other specific characteristics, and intersectional disadvantage).

In the UK context, the decision to work with Studiosity, seems to relate to a viable model to meet the academic support needs of a large and diverse number of students, which is beyond the scope of an institutional academic skills team to deliver. From within the Australian context, Benzie & Harper (2020), identify three alternative approaches to provide academic support and development, and they use Studiosity as an example of the third: (i) machine-based tools that automatically screen and provide feedback on texts; (ii) content-based programs on writing, language and learning at university; and (iii) person-based services that connect students to writing tutors via an online platform. Benzie & Harper argue for the importance of the discipline context informing writing development and feedback. In the discussions in the UK for this review, discipline context has not been raised significantly, and the alternative approach relying on artificial intelligence, or 'AI writing feedback' has not been discussed. Rather the debate is, albeit implicitly, about whether writing feedback can/should be delivered by a central institutional team, or an external, person-based provider, such as Studiosity.

While the primary rationale for partnering with Studiosity relates to students, MLU identifies two additional staff related reasons.

- Academic staff workload: staff were struggling with marking, and felt they were spending a significant amount of time correcting grammar and making sense of the writing, rather than focusing on the academic content of assessments.
- Small academic support service (four full time staff) who could not provide one-to-one support for 20,000 students.

This justification is supported in a working paper by Pike (2022) relating to the implementation of Studiosity at the University of Bedfordshire, in which the scale of the support needed, and the burden on academic colleagues is identified. These examples from MLU and Bedfordshire demonstrate the ways in which decisions are framed as 'internal or external team', as opposed to, at one end of the spectrum machine-based feedback, or at the other, writing development situated within the discipline. It should be noted however, as is discussed in the section 5, UK providers see Studiosity as one aspect of a coherent model of academic support and development.

The benefits to students, staff and institutions are revisited in sections 7, 8, 9, 10 and 11, and used to inform the evaluation framework (Thomas 2023b).

4. A focus on student impact

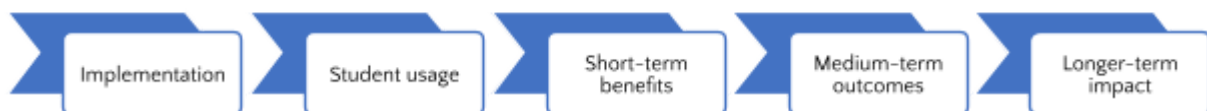
In the current UK context, there is great interest in understanding the impact of various interventions aiming to improve the student experience and outcomes, and reduce differentials

between student groups, (as discussed in section three), but evaluating learning, widening participation and student success interventions is challenging (e.g. Devlin 2008, Chalmers and Gardiner 2015, Harrison et al 2018, Thomas 2020a). Programme Theory evaluation tools, in particular Theory of Change (ToC), can be used to help overcome some of the challenges involved in evaluating the impact of interventions to improve the student experience, and moving beyond relying on satisfaction ratings and student feedback alone (Thomas 2020a). ToC approaches are promoted by the government (HM Treasury, 2020), the Office for Students (OfS 2019) and the Centre for Transforming Access and Student Outcomes (TASO, set up by OfS in 2019, <https://taso.org.uk/>).

‘Theory of Change’ (Weiss 1995 and Anderson 2005) and other Programme Theory evaluation tools, such as Logic Chains and Logical Frameworks, are intended to help make the relationship between activities/outputs and impact explicit, and to identify intermediate outcomes or steps that indicate progress towards longer term goals. They begin with a prediction, or a theory, of how the activities will lead to an overarching long-term goal. ‘Predicting what outcomes might emerge’ means that Programme Theory evaluation approaches are particularly suitable for evaluating the outcomes of interventions in complex contexts, such as education, or where outcomes emerge after completion of the intervention (Dyson and Todd 2010: 124). The process of developing a Theory of Change is important (as discussed on the TASO website for example), and it also generates an evaluation framework, which maps a logical and testable pathway between activities and longer-term impact, via intermediate steps or indicators. Previous work (Thomas 2020a) has conceptualised ‘intermediate indicators’ as short-term benefits, and medium-term outcomes. A logic chain can be used as an alternative way of visualising the relationship between intervention activities, short-term benefits, medium-term outcomes and longer-term impact.

The evaluation framework (Thomas 2023b) focuses on the student perspective, as this is the primary rationale for higher education providers to introduce Studiosity (section 3), and can generate evidence to inform external scrutiny, such as the Teaching Excellence Framework and Access and Participation Plans. Below is a simple logic chain for Studiosity, which informs the rest of this report, especially sections 5, 6, 7, 8 and 9, as well as the Evaluation Toolkit (Thomas 2023b).

Figure 1: Studiosity logic chain



5. How partners have implemented Studiosity

While on the surface, the rationales for engaging with Studiosity are diverse, in essence there is much convergence (to improve student experience, satisfaction and outcomes, and reduce student differentials; and to free up academic and professional service staff from the mundanity

of writing feedback). In terms of how higher education providers have implemented Studiosity there is also much in common, and some unique features. The two case studies demonstrate many of the similarities and differences.

Northern Regional University (NRU) is a large, multi-disciplinary university recruiting strongly from the region; it has a significant population of commuter and first in family students. The university promotes support as the norm for everyone, and Studiosity is offered to all students. NRU offers a tripartite approach to supporting students, combining discipline-specific academic advisers, with central academic and pastoral support and advice and work experience to improve students' employability and outcomes; Studiosity is embedded into existing academic support services, and does not have a separate identity. Studiosity is advertised on their webpage about essential higher education skills, it is promoted and accessed via the virtual learning environment, and use of Studiosity is encouraged by academic advisers. One of the most effective ways of informing students about Studiosity is in big lectures, but this is more difficult since the COVID-19 pandemic.

Multi-disciplinary London University (MLU) has a diverse student population, with more than half of the students from ethnic minority groups and around a third mature students; 60% are commuters, often spending a relatively long time travelling. Initially Studiosity was introduced as a pilot into one faculty with low rates of student satisfaction (especially around assessment and feedback). The pilot found that the students appreciated having access to the service in the evenings and the weekends, they liked the personalised feedback, and they reported high rates of satisfaction. Studiosity was then offered to all level 4 (first year undergraduate) students, and is now available to all students, but it is targeted at students making the transition into academic learning. Studiosity retains its branding, but is very clearly provided and endorsed by the University. Studiosity is advertised to students on the VLE, and students may be encouraged to use it by teaching and professional staff, especially as a first port of call. For example, if a student books a session for academic skills they may be initially signposted to Studiosity. Studiosity is often embedded into academic programmes through the validation process, as one of the ways of developing students' academic skills. 8% of all eligible students use Studiosity, but this is 12% of level 4 and 5 students and only 1% of level 6 students.

The common features of implementation are:

- Studiosity is part of a suite of academic development and support services, rather than being used in isolation or replacing other services.
- Studiosity is promoted through a range of mechanisms, particularly the VLE, but including staff and promotional activities. Pike (2022) found at the University of Bedfordshire, students 'almost universally found out about the service via VLE-Based announcements (almost 70%) and the other key mechanisms were via a lecturer (nearly 20%).
- Both the case studies institutions, and others implemented a pilot. In each case the evidence has been persuasive and led to an institution-wide roll-out. The Studiosity case studies (<https://www.studiosity.com/success-stories>) describe the pilots that various institutions have undertaken.
- Following successful pilots, the case study institutions – MLU and NRU – have implemented full roll-outs to all students, and this is common. Some HEPs have

reported that they have had to reduce the number of submissions each student can have to ration the service and ensure a balance between the number of individual users, the added value, and the cost.

Studiosity is embedded within a package of support, and promoted widely through a range of mechanisms

The focus groups provided a great deal of additional information about how Studiosity is integrated into the package of student support and promoted widely through a range of mechanisms. Studiosity is provided together with other academic development services, which are usually provided centrally by the higher education institution, and it complements skills development embedded into the curriculum, either by academic subject specialists or by skills staff.

I promote Studiosity as part of an integrated approach because I don't believe that Studiosity is the be all and end all. I'm very much about promoting the Skill Centre. So Studiosity is offered as part of the rest of the work that we do in the Skills Centre around academic development... so it's very much a wraparound support service. So, I don't like to think that Studiosity is in isolation from the rest of the academic skills offered that we provide for students at the Skill Centre. So very much an integrated approach to academic skills development.

I very much echo that in that, we promote it as part of our wider package of study skills support that we offer to students, which is often kind of embedded in teaching as well as are central workshops that we provide. Staff focus group 3

More specifically, some institutions view Studiosity as a first port of call, being able to provide 'routine' feedback to large numbers of students; whilst more complex needs might be dealt with by other services. This additional support includes helping students to understand and utilise their Studiosity feedback.

I think if they wanted more tailored feedback, if they wanted help understanding their students report, if they wanted support more with things like critical writing, argument, structure, we then say these are topics that we can help with in a 1 to 1. So, in many ways, Studiosity is kind of a first line for us because I think it gives students a lot of feedback and that if they've got more complex questions or they want something a bit more tailored to them, then a 1 to 1 is maybe more appropriate. Staff focus group 3.

Focus group participants noted that it is important that Studiosity can encourage students to use other services, and this is facilitated by the feedback report signposting them correctly to another service.

One thing we have been able to do with Studiosity is customise the wording, so that when students get that report, if there are particular issues that have been flagged, it will say why not go to the Skill Centre and it gives them a link. So, we've kind of got that embedded in there. So, it's trying to close that loop I guess when they do get the Studiosity feedback. Staff focus group 3.

The idea of Studiosity being a 'gateway' to other services is discussed further in section 7.3. In the focus groups staff discussed the ways in which they promote Studiosity to students, and this is facilitated by the fact that it is integrated into the institutional suite of services contributing to academic skills development. However, in several discussions, staff pointed to the importance of peers and lecturers in promoting the use of Studiosity.

Well, we have a publicity campaign. We talk about it a lot. We run a whole load of pre-sessional studies skills workshops during September. So, we always have the Studiosity slide and talk about it. Then we advertise it in the student newsletter, which goes out every week. At various points we promote it using our portal. So, since they log in, they'll see a message. I think the main thing that encourages students to use it, there's word of mouth. We sort of got to a point when it was critical mass and students are saying, oh, this is great. Staff focus group 5.

Differences in the way Studiosity is implemented

- Institutional or Studiosity branding.
- Assessment process.

In terms of institutional or Studiosity branding, the two case study institutions take a slightly different approach: at NRU students may not explicitly know that they are using Studiosity as it is embedded within their own academic support provision, while at MLU students may be more fully aware that Studiosity is external to the University. Crucially, in both institutions, students know that the service is endorsed and provided by their university, and it is an ethical service, although there may still be some students who are not quite sure that they are allowed to use it. It is not clear whether one approach is preferable to the other.

One university involved in the staff focus groups described how Studiosity is built into the assessment of one first year course. Before the assessment, students must submit their assignment to Studiosity; they must then revise the assignment in line with the feedback, and then the assessment and the Studiosity feedback report must be submitted. This model is designed to encourage students to use Studiosity, and engage with the feedback, to contribute to their writing development at the beginning of their academic career. This is seen as particularly important given the low confidence of the students who take this course. A similar approach (<https://www.studiosity.com/case-study-roehampton>) was taken by the University of Roehampton, and during their pilot year the University had the highest levels of student engagement with Studiosity globally: 25.8% of students across the University used Studiosity, and 8,577 Writing Feedback submissions and 550 Connect Live sessions were delivered in one academic year. (This was the highest percentage of students within their cohort with access who engaged, not the absolute highest number of students, submissions or minutes used). In subsequent years, Roehampton built on this successful approach, and the cohort engagement rate was almost 40%.

A more recent partner of Studiosity, the University of Sunderland has taken a similar approach linking Studiosity to assessment: a targeted 'Write it right' campaign in the first semester for new undergraduates. Although this is a formative assignment, the campaign encourages students to utilise Studiosity and submit their formative assessments, and this provides the university with insights into any challenges that students may have and allows students to

access support. The success of this intervention was evaluated by the proportion of students who used Studiosity for their formative assignment and who subsequently passed the module (research methods) on the first attempt.

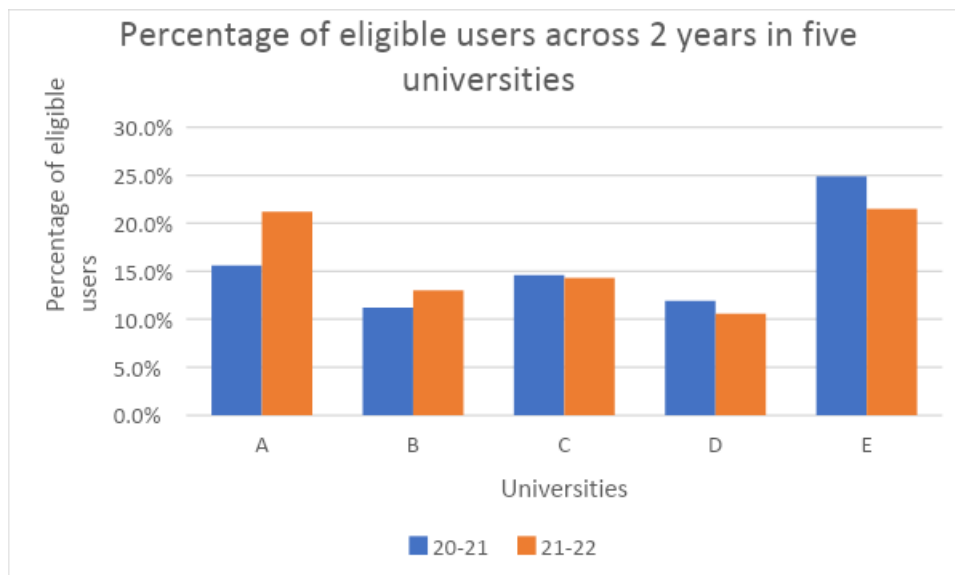
“There is a significant and strong association between doing the formative assessment and passing at first attempt $\chi^2(1) = 46.41, p < .001$ (Fischer’s exact) as shown in figure 1 below. The risk ratio (pass rate ratio difference) is 8.69 [95% C.I. 2.92 – 25.80] with an odds ratio of 31.18 [95% C.I. 8.80 – 110.41] – so the odds of passing at first attempt if engaging are 31.18 x higher than those not engaging. In terms of effect size this is a massive difference but NB this may purely be an effect of those who chose to engage. (Rees, 2022)

Overall, the University of Sunderland has also achieved high rates of use during its first year of implementation, at around 24% of level 4 students. The focus group discussions and the evidence from these other two universities suggests that embedding Studiosity into the assessment process increases take up, which is likely to result in benefits for students (see sections 7, 8 and 9).

6. Student participation and usage

Looking across a sample of five higher education providers in the UK who have all used Studiosity across two consecutive years (04/20–04/21 and 04/21–04/22), Chart 1 shows that usage varies from around 10% of eligible students to a maximum of 25%.

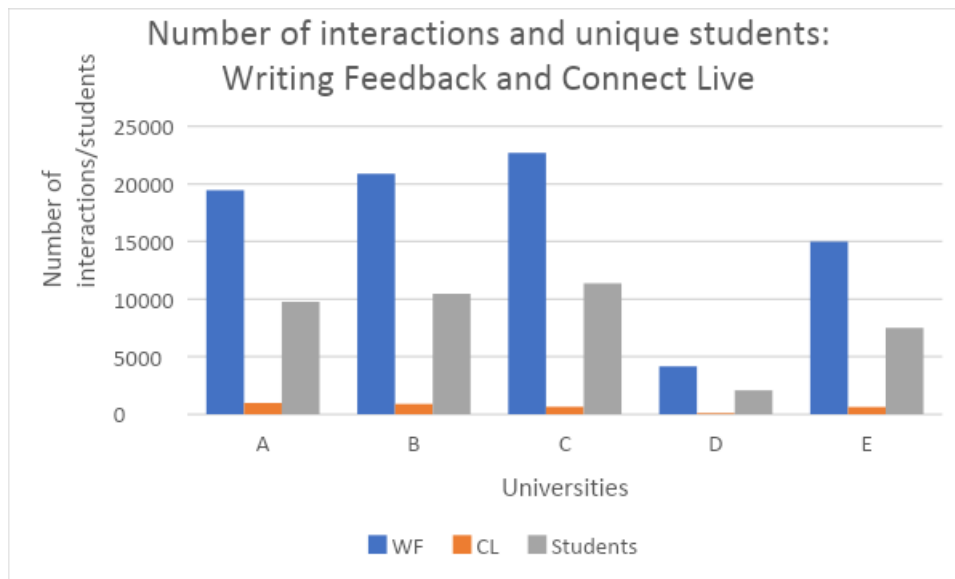
Chart 1: Usage across five university partners 2020–2022



In the UK writing feedback is currently the most popular service, accounting for around 96% of interactions, and therefore this report focuses on the writing feedback service.

The number of interactions can be compared with the number of unique students using Studiosity services, and chart 2 below shows that on average, each student uses Studiosity twice.

Chart 2: Interactions and unique students



Studiosity data shows that overall, the busiest month is April and the most popular day to use its services is Wednesday (although there is some institutional variation, presumably reflecting assessment patterns). The most active time is between 16.00 to 17.00, but 54% of use takes place out of hours (17.00–9.00). Across these five sample institutions, this ranges from 49% to 58%. But other evidence suggests this varies between institutions, and probably reflects differences in the student cohorts. Data from the University of Bedfordshire, defined as a ‘widening participation’ institution (<https://www.studiosity.com/case-study-bedfordshire>), from 2021/22, finds that 77% of usage was out of hours, while a more research intensive university reported slightly lower rates of out of hours usage (Dollinger et al 2020, p5).

In two of the universities the most active users are level 4 students, in two universities it is level 7 students, and in one university level 6 students. This may reflect different ways in which Studiosity is promoted to students. In the focus groups, this issue was discussed, and it was suggested that the patterns of use reflect the assessment strategy, which in one institution makes limited use of formative assessment in the first couple of years, and so in the final year students have more time to seek feedback, and a longer timescale, which enables them to seek writing feedback.

I think, for us, some of the problem is with the institutional lack of grip on the assessment design. If I'm perfectly honest, we don't do enough [formative] work and there's a massive overreliance on the high stakes summative work. And then I think the influence for Studiosity is that it tends to be used by students in a later stage, you know, level six and level seven for dissertations, because that's

pretty much the only formative work that they do, and it's the only place where they are encouraged to look at drafts within a timescale that they can do something with. And I do think that that is a significant problem. I think if we changed our assessment strategy here, we would use Studiosity differently. Staff focus group 3.

Usage data from the case study universities provides some insights into usage by students with different characteristics, summarised in Table 2. This is an important issue to explore, as some of the reasons for implementing Studiosity (discussed in section 3) focus on improving the experience and outcomes of students from particular groups (particularly linking to Access and Participation Plan targets and international students).

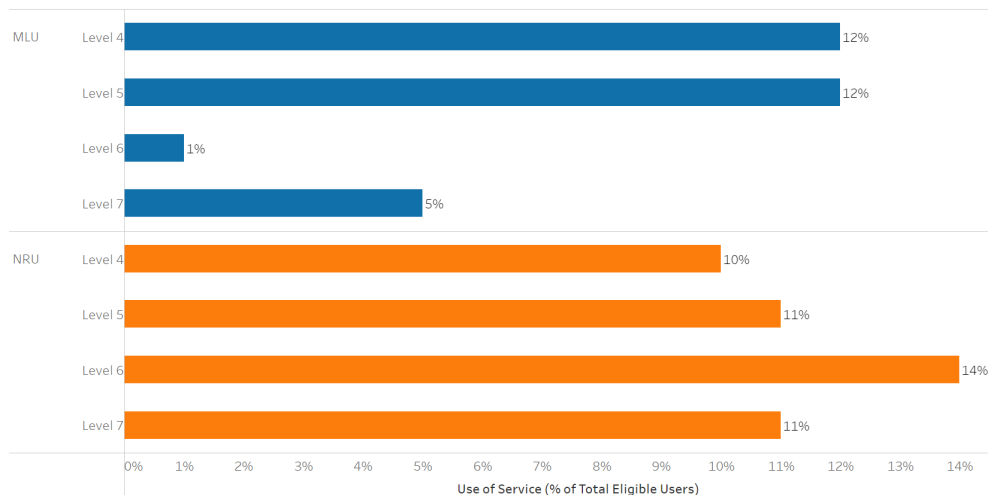
Table 2: Usage data from case study institutions, 2020/21

	University	MLU		NRU	
	Student group	Number	Percent	Number	Percent
	Level 4	638	12%	695	10%
	Level 5	522	12%	767	11%
	Level 6	27	1%	938	14%
	Level 7	98	5%	536	11%
Level 4	White	287	16%	507	10%
	Ethnic minorities	248	9%	183	13%
	Home	601	13%	645	10%
	International	36	6%	50	13%
	Under 21 on entry	382	11%	437	9%
	21 and over on entry	256	15%	258	14%
	Female	511	17%	505	13%
	Male	125	6%	188	6%
	IMD 3-5	249	15%	349	9%
	IMD 1 & 2	313	12%	314	12%
	POLAR4 3-5	377	12%	294	9%
	POLAR4 1 & 2	123	16%	366	11%

This data reveals different patterns of usage by students between the two universities. Overall usage for the two case study universities is shown in Chart 3. It can be seen that MLU has higher use in levels 4 and 5, while NRU has highest use in levels 6 and 7. Higher usage in level 4 reflects the way in which the service is promoted, to support student transition into higher education.

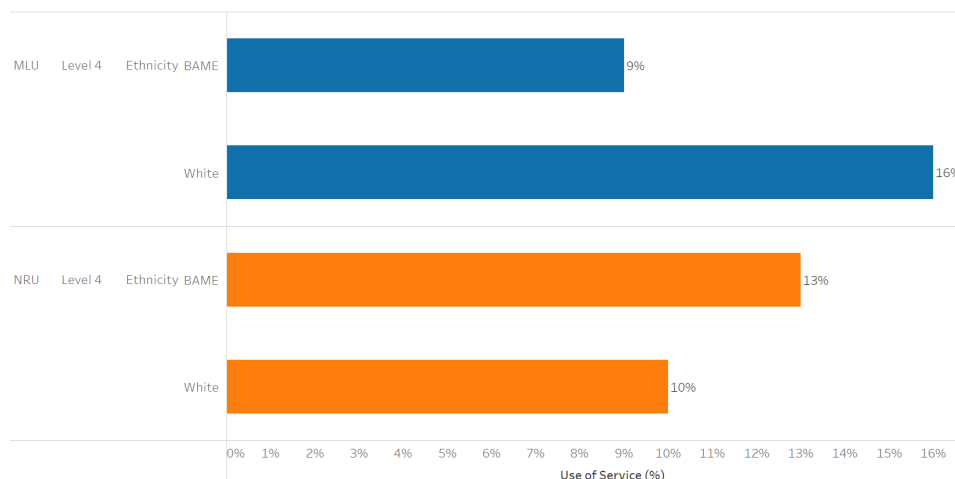
I think initially when Studiosity was first introduced to us, I always felt that Studiosity was good as a transition and the scaffold. And I still very strongly feel that, as a student progresses through the years, that writing skill, they need to have less and less of a scaffold and go solo because, that's the skill that develops the rest of their lives. And that's the reality of it now. So part of this is because it's been promoted as a transition tool. Staff focus group 4.

Chart 3: Comparison of Overall Usage by Institution and Level



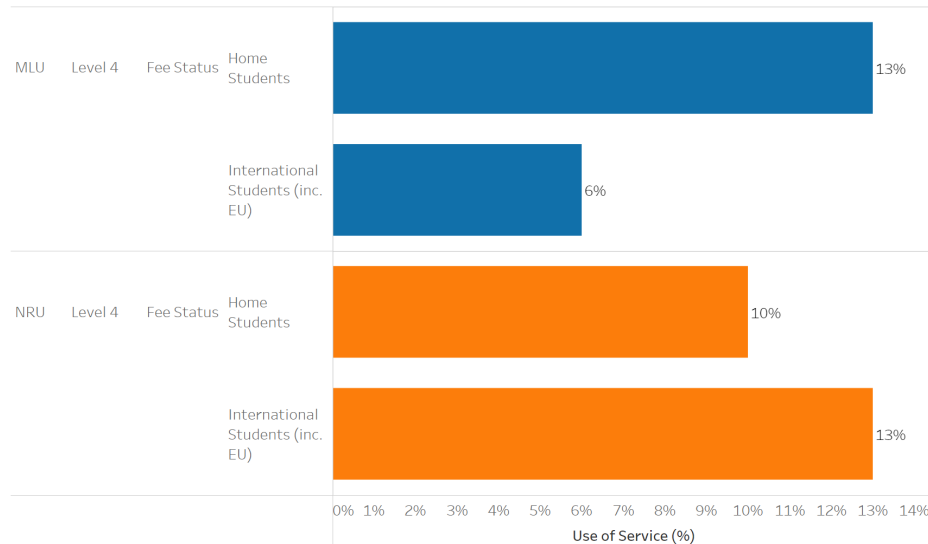
NRU has a higher rate of usage by ethnic minorities compared to White students, whereas at MLU the reverse is true. This is shown in chart 4.

Chart 4: Comparison of Overall Usage by Institution, Level & Ethnicity



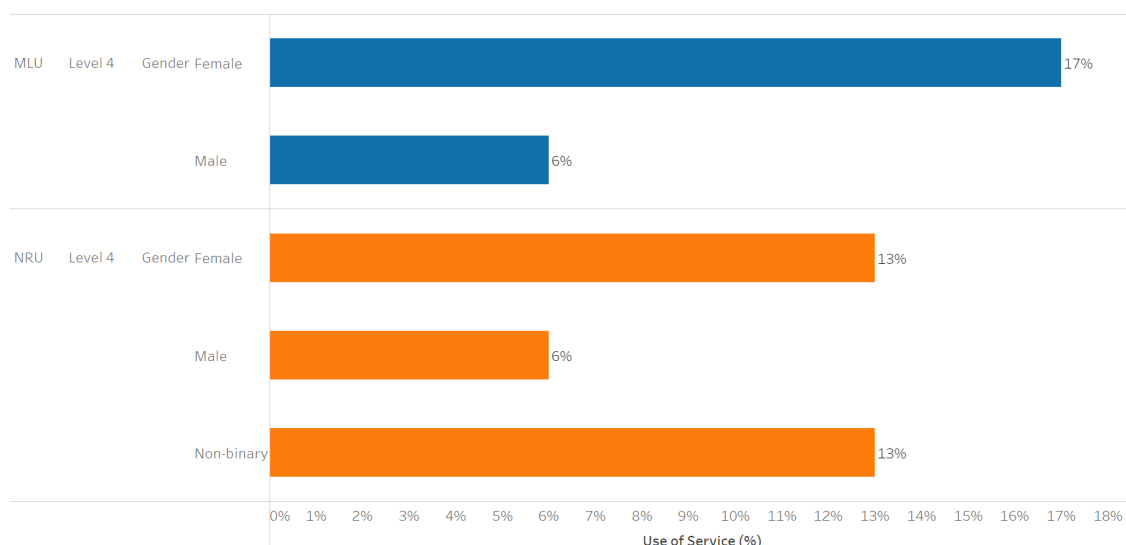
A similar pattern is seen with regards to home and international students. A higher proportion of international students use Studiosity, compared to home students, at NRU, and a lower proportion at MLU. This is illustrated in chart 5.

Chart 5: Comparison of Overall Usage by Institution, Level & Fee Status



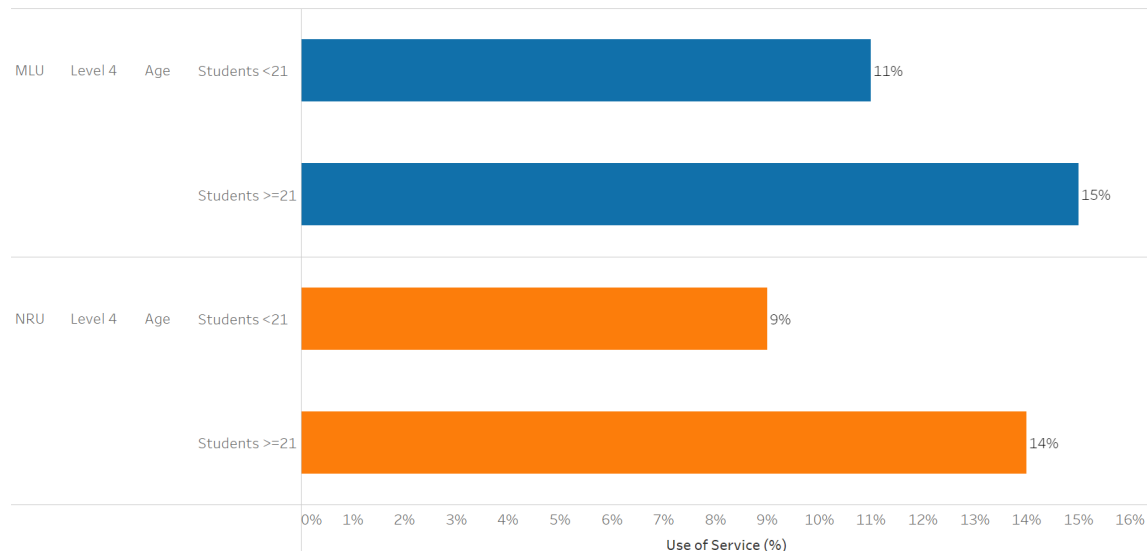
In terms of gender (chart 6), both the case studies reflect previous findings (Thomas 2020) that students who describe themselves as male are less likely to use Studiosity than students who describe themselves as female or non-binary. (Please note that no data was provided by MLU for any students who do not identify as male or female: this may have been due to suppression of the data due to small sample size). This is a significant difference, both in terms of the size, and in the context that male students have lower rates of continuation and completion than female students (OfS 2022).

Chart 6: Comparison of Overall Usage by Institution, Level & Gender



Both of the case study institutions have higher usage by mature students compared to young students (see chart 7). (Mature is defined as aged 21+ on entry to higher education). Again, this accords with the findings from Thomas 2020b.

Chart 7: Comparison of Overall Usage by Institution, Level & Age



This may be as mature students are more aware that they have less recent experience of studying, or that they have a greater appreciation of the differences between school/college and higher education study demands, or having made the decision to enter HE at a slightly later date, they may be more committed to making a success of the experience.

In terms of socio-economic status institutions have provided data with regards to two measures: Index of Multiple Deprivation (IMD), and POLAR4 (participation of local areas). Quintiles 1&2 are priority groups for both measures within Access and Participation Plans. The participation by students from these groups across the case study universities is shown in charts 8 and 9.

These suggest that Studiosity is being used to a slightly higher degree by students from lower socio-economic groups (IMDQ1&2 and POLAR4Q1&2) than from higher socio-economic groups (IMDQ3, 4 & 5 and POLAR4Q3, 4 & 5).

This is very encouraging given the commitment in nationally and institutional APPs to improve the continuation and success of students from these groups, and supports a comment made during one of the focus group discussions:

We looked at a sample group of students [using Studiosity] and looked at the personal details of those students, and how many fell within our categories of students who belong to, you know, students from non-traditional backgrounds. WP Backgrounds. And I think we did find that a big proportion of the students were using Studiosity as that was as far as we could go because it was only a pilot, we couldn't match it with any outcomes. Staff focus group 4.

Chart 8: Comparison of Overall Usage by Institution, Level & IMD Quintile

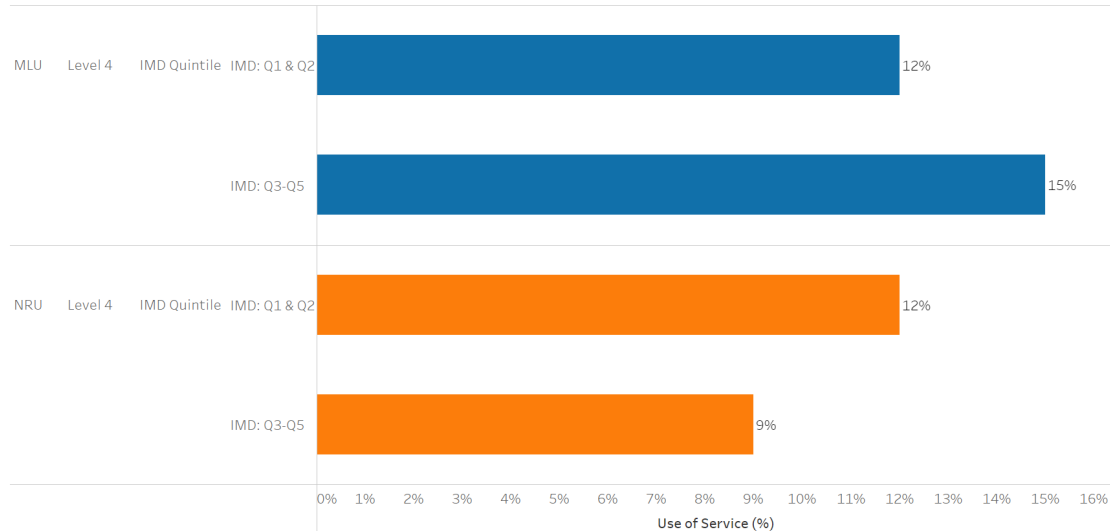
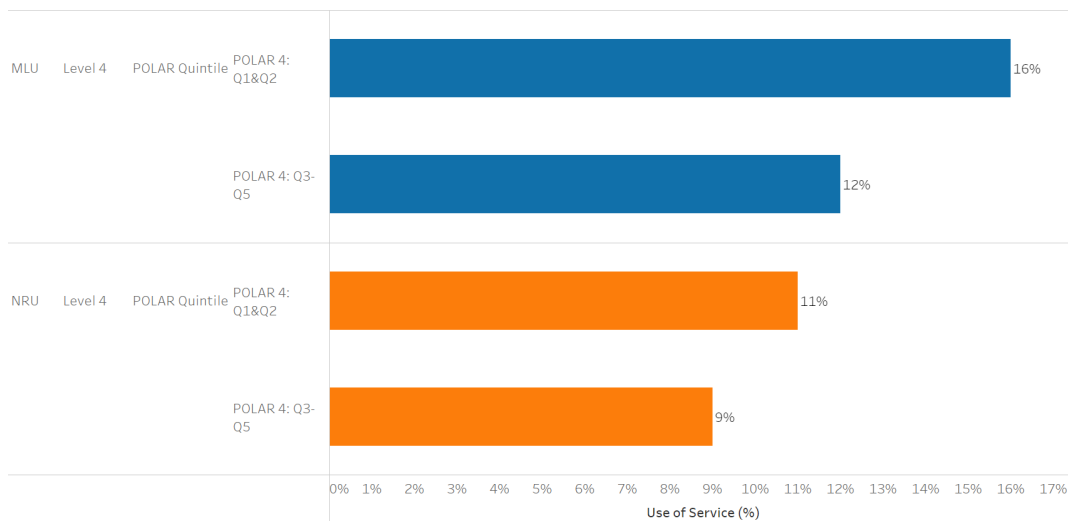


Chart 9: Comparison of Overall Usage by Institution, Level & POLAR Quintile



Some of the information about differential usage between institutions was shared with colleagues participating in the focus groups, and it raised questions about why students do not all use Studiosity, and how institutions can encourage students from particular groups to increase their usage. The main reasons suggested for students not using Studiosity are:

- Poor time management, resulting in insufficient time to submit an assignment and act upon the feedback before the submission deadline.
- Unwillingness to invest time in developing capacity and preferring a third party to simply improve their assignment.
- Legitimacy of using a writing feedback service.
- Concern that a free to use service (as Studiosity is in partner institutions) is inferior to a service they pay for.
- Perhaps not understanding what Studiosity offers.

It was noted that students with less good time management, often run out of time, and so are unable to utilise Studiosity, even though they would benefit greatly from the service. Students have to submit the assessment to Studiosity in advance of the deadline, and allow sufficient time before the final submission deadline to make the changes suggested in the writing feedback. This problem can be intensified by the way assessment deadlines are organised across a students' course.

Our university has a lot of chunked deadlines, so everything is due in, in a similar period of time, and because students don't do things in a timely fashion, and they do leave things at the last minute. They don't have time to then prioritise the work to get the feedback, and they're just trying to meet deadlines. I think that's one of the things that we're trying to help develop with them, that they then have time to access services and support and develop their work. Now I have time to develop my skills to make anything better because that's going to take too much time. Staff focus group 2.

The problem of planning ahead and time management may be particularly significant for some students, who get anxious about ensuring their assignments are as good as possible:

We've got a lot of students with perfectionism, and they worry that if they get that feedback, then they're going to have too much to deal with to be able to make their work better. Staff focus group 2.

Staff suggested that the assignment calculator (provided by Studiosity) could be used better to help students know how much time they need, and to submit assignments to Studiosity with sufficient time. This points to the value of either a 'campaign' or building Studiosity into the assessment process to help encourage students to plan ahead, and be able to use the service and have time to make the changes suggested.

It was noted by staff however, that some students do not want to put the work in required with Studiosity, they want to have a quick fix, and not to develop their skills. Staff commented that 'It is not cost free in terms of time'. Some staff felt that students might worry that academic staff will see the Studiosity report, which may stem from an unease about the legitimacy of using Studiosity. It was also noted that there is a possibility that when a service is free, it can be viewed as less good than when you pay for it – this may be how students feel when comparing Studiosity to other services such as Grammarly. Finally, it was suggested that the name 'Studiosity' does not describe what the service offers, and so it does not speak to students.

7. Students' experience and immediate benefits

This section of the report builds on section 3, what partners want from Studiosity, and relates to the third stage in the Studiosity logic chain, focusing on the immediate benefits students gain from using Studiosity. It reviews evidence from the focus groups and case studies, and UK and international literature to provide evidence of the short-term benefits that accrue to students using Studiosity.

I always tell [students] that they should use Studiosity because I think a lot of students on these routes have had quite a bit of time outside of studying, and they're very nervous about the first piece of work and they're very engaged and

they want to do well. So, I say, well, you know you can use Studiosity, you can use it and send it. And sometimes it'll be ready when you wake up the next morning, test it, it's fantastic. You feel like you're really using your time efficiently... I think it helps you to get an idea of your writing style and you get really good positive feedback from the service and it helps you. It kind of keeps you going when it's quite hard to do that. Staff focus group 1.

Through the focus groups, staff identified a range of ways in which they thought the students benefited from Studiosity: Overcomes lack of confidence to ask for help.

- Provides instant reassurance.
- Develops students' writing skills.
- Ethical service, rather than using external unethical service.
- Personalised service
- Easily accessible online.
- Develops students' understanding of academic integrity and the skills needed for referencing.
- A good experience that encourages students to use the service again.
- Identifies students with learning differences.
- Flags up issues and can help with referrals to other services.

Brodie et al (2021) differentiate between *service* experience and *learning* experience, in their analysis of Studiosity feedback comments from students. The service experience includes categories such as 'responsiveness', and sub-categories including timeliness, clear communication and coverage of the feedback being comprehensive, precise and including examples. While this may demonstrate that students view themselves as consumers, Brodie et al inform us that research shows that 'customer satisfaction with a service transaction is strongly related to the perception of overall service quality over time (Sureshchander, Chandrasekharan and Anantharaman 2002)' (Brodie et al 2021, p9, no pagination). The learning experience codes Brodie et al use are: confidence, improvement, reinforcement, understanding. They note that the volume of service experience comments was almost twice the volume of learning experience comments (Brodie et al 2021, p10, no pagination).

In the list of benefits listed above there are some service experiences, such as being easily accessible, and a personalised and ethical service. In this report, we consider student satisfaction with the service, but the review is most interested in students' learning experience, in particular the following short-term learning benefits:

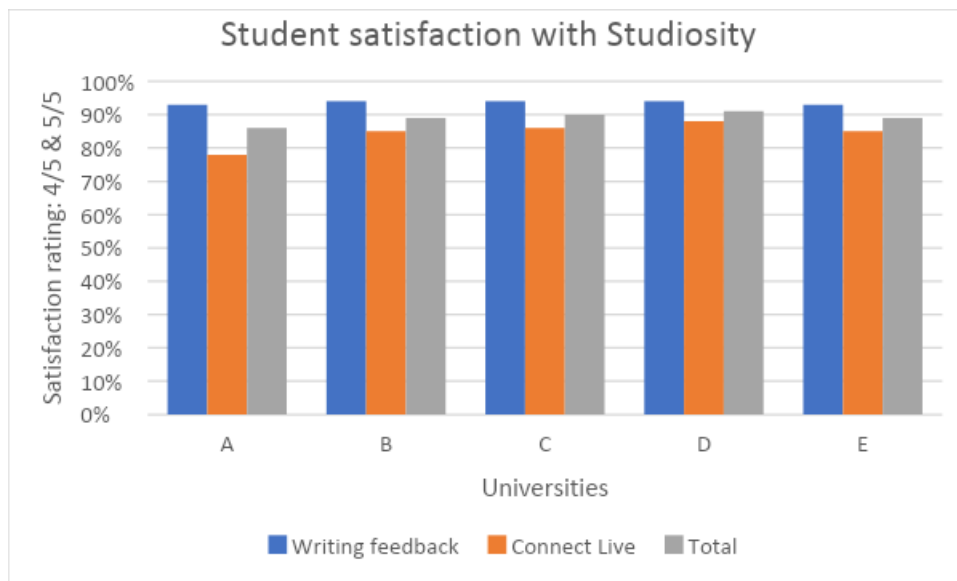
- Confidence with writing
- Confidence to access other writing development and wellbeing services
- Writing skills
- Confidence and understanding to improve academic integrity
- Motivation
- Wellbeing

Satisfaction

For NRU a primary purpose of Studiosity is for students to have a positive experience, and they report that feedback from students is very positive, with 100% of students saying they would recommend Studiosity to others. Indeed, all the available evidence suggests that students are satisfied with the Studiosity experience.

Data from Studiosity about students' immediate satisfaction from across a sample of five higher education providers in the UK who have all used Studiosity across two consecutive years (04/20–04/21 and 04/21–04/22), shows that students' satisfaction with writing feedback is between 93% and 94%, while satisfaction with connect live is 78% and 88%, and total satisfaction is between 86% and 91%. (Satisfaction here relates to students rating their satisfaction as either 4/5 – satisfied, or 5/5 – extremely satisfied). These figures are shown in the chart 10 below.

Chart 10: Student satisfaction



These high levels of satisfaction are corroborated by other evidence. Dollinger et al (2020, p5) report that 95% of students were satisfied or extremely satisfied with the writing feedback, and 78% were satisfied or extremely satisfied with 'Connect Live' services. Brodie et al 2021 [no pagination], report that the overall satisfaction ratings left by students are 92% (extremely or somewhat satisfied) with respect to both services.

Confidence

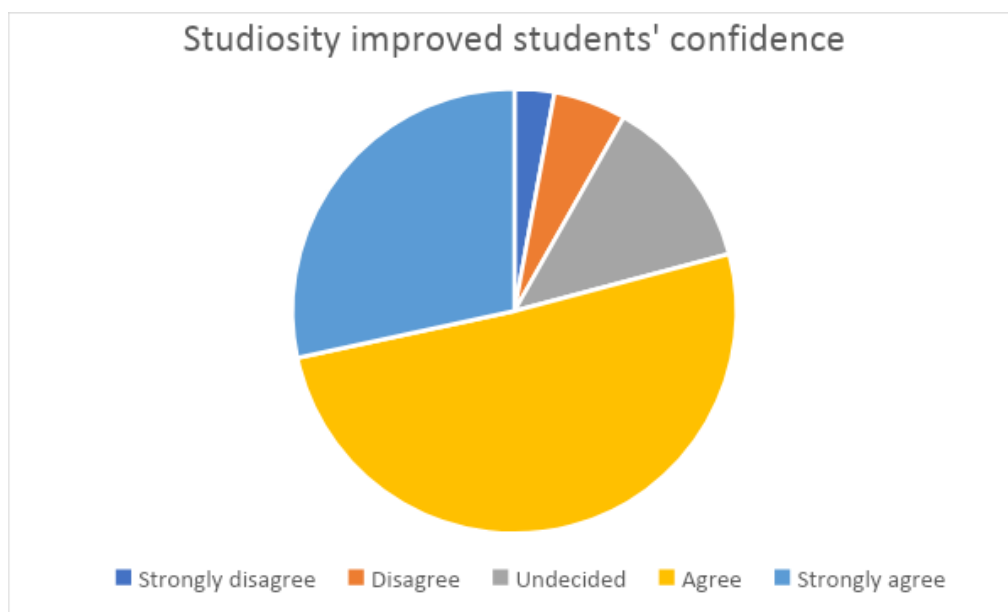
I found that the feedback was very empowering, but like always, always getting better. And it did improve my marks, but it also improved my confidence. Staff focus group 1 (former student).

Confidence appears to be the most widely acknowledged and important benefit that students gain from using Studiosity. It was raised frequently in the online discussions with staff in this study, and is reported in the wider research. The UK report on the impact of Studiosity on the student experience (based on 419 responses) found that the majority of students (79%) thought that Studiosity had improved their confidence. These results are reproduced in the table 3 and chart 11 below.

Table 3: Studiosity improves confidence

Response	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Number	12	22	53	213	119
Percent	2.9%	5.3%	12.7%	50.8%	28.4%

Chart 11: Studiosity improves confidence



In Pike's (2022) study of Studiosity at the University of Bedfordshire, he asked students to rank the most and least important reasons for using Studiosity. He reports 'consistently (even when looking at the data at year group level) students ranked – *I wanted feedback to help me feel confident about my writing* – was the 1st choice 124 times (out of 241 responses)'. In a smaller survey in a different institutional context, Dollinger et al (2020, p6) report that 'the majority of students... believed they were confident in their ability to learn after using the service (n = 31, 81%)'.

Looking at the feedback comments from 14,000 Studiosity users, over a 12-month period, from universities in Australia, New Zealand, Singapore and the United Kingdom, Brodie et al (2021, p

14, no pagination) report: 'One of the most powerful coding results was the emphasis students placed on improving their Confidence.'

Gateway access other services

I think it's more of a stepping stone.

I think they actually... some students, they may struggle with help-seeking behaviour. Studiosity is another good way to transition into the idea of seeking help, and then maybe looking at attending, a 1 to 1, or something like, the skill centre after they've used Studiosity. Staff focus group 2.

The staff involved in the focus groups not only felt that students developed their confidence with their writing skills, but that the feedback provided students with 'instant reassurance', and gave them the confidence to access other services to ask for additional support with their writing development. It is for this reason that some institutions embed Studiosity into the assessment process, especially towards the beginning of the first year, to develop confidence and encourage support seeking behaviour, as these comments suggest:

My experience with when I see students face to face. Quite a few of them have tried Studiosity first. Okay. And then they come to us sometimes to explain. The feedback is from Studiosity. I mean that that is sometimes a reason why they want to see us because they don't quite understand the feedback.

Referencing in general actually is something that students come and see me about off the back of Studiosity feedback. So even if the Studiosity feedback is you need to perhaps look at your referencing again, just tidy that up, whilst they obviously won't go into the details. It will encourage students to come and see the academic support team for a bit more help on that. Staff focus group 4.

Another related issue identified in the focus group discussions with staff, was that Studiosity could identify students with specific issues, such as learning differences, and indeed, both case study institutions felt that Studiosity is particularly useful to disabled students.

The intervention notices require the institution to follow up and support students to enable them to engage with and benefit from other services, and sometimes students do not take up the offer of additional support.

One of the things that's quite interesting for me is while we get these early intervention notices, which is where a Studiosity person has identified that a student writing is if concerning at the moment, what we do is we then invite them in to meet with us at the Skill Centre, and what we find is they often don't take us up on that. So, I think that's one of the things we want to review is is there something different that we should be doing with those early intervention notices? Staff focus group 2.

In addition, Studiosity has the capacity to signpost students to other institutional services, such as specific wellbeing and support services within the institution. It was generally agreed that Studiosity acts as a gateway to other services, both by building confidence in accessing help and direct referrals.

One focus group participant (focus group 2) did suggest that this was simply because Studiosity is engaging students who are already engaged with student services, but this was not the view of the majority.

Furthermore, the data presented in section 6 suggest that students from groups at higher risk of withdrawal (lower socio-economic status and from the most deprived areas, Black, Asian and ethnic minority students, and mature students – see OfS 2022) are using Studiosity at equivalent or greater levels than their more advantaged counterparts in some universities.

Skills

Developing students' academic skills underpins the decisions of many universities to partner with Studiosity. There is a range of 'skills' that students might expect to gain from using Studiosity, which was generated through the discussions with staff.

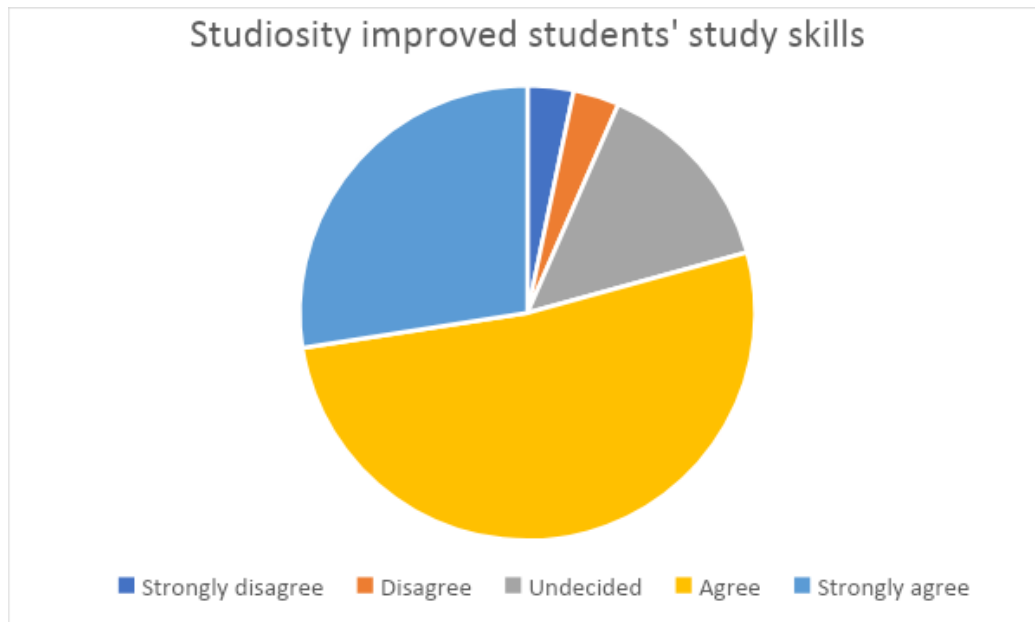
- Writing skills
- Organisation and structuring of writing
- Grammar and punctuation
- Referencing
- Academic English
- Time management and planning
- Learning how to learn
- Critical thinkers
- Problem solvers
- Academic integrity

Pike found that checking 'choice of grammar and punctuation', 'choice of language was appropriate' and 'referencing' were comparatively low priorities for students using Studiosity at the University of Bedfordshire. The UK report on the impact of Studiosity on the student experience (Thomas 2019) found that the majority of students (79%, based on 419 responses) reported that Studiosity had improved their study skills. These results are reproduced in table 4 and chart 12.

Table 4: Studiosity improves study skills

Response	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Number	14	14	60	215	116
Percent	3.3%	3.3%	14.3%	52.3%	27.7%

Chart 12: Studiosity improves study skills



In the discussions staff noted that students have to put the work in to benefit from Studiosity:

I was going to say I would compare Studiosity or engagement with Studiosity or something similar, to a treadmill or an exercise bike. You know, I can buy it. I can afford to have one. I'm looking at it now. Last time I looked, I actually used it. And, you know, the more you use it, the more you benefit from it. But yeah, therein lies the secret and the key to it. Use it or not. Staff focus group 3.

This also relates back to the discussion in section 6 about the time involved in using Studiosity.

While both MLU and NRU offer Studiosity (after their pilots) to all students, they also state that they would like specific groups of students to benefit. It is therefore important to consider which students are using Studiosity (discussed in section 6), and how they are benefitting (discussed further in sections 8 and 9).

In the staff focus groups, staff from NRU reported that Studiosity had been particularly helpful to international students, supporting them to develop the skill (and confidence) to study successfully in the UK.

This extended comment refers to a small study by NRU about the experience of international students studying PGT courses, and how their assessment and writing expectations are different – and students reported they had turned to Studiosity for help.

I've been doing a little bit of research with, so it's not a big study at all, but working with some international postgraduate students, and what they've been talking about to me or we've been trying to sort of tease out, is how studying at NRU differs from their home institution to start with. And the international

students I've been talking to in the main have come from India or Nigeria and often their previous experience of assessment has been very examination focussed. So when they transition into studying here, they're exposed to a much wider range of assessment methods and they are quite anxious then about what that entails. And also, their writing skills for writing and examination are different to those that you would do in an extended piece of writing.

And some of the students, when we were running the focus groups, a few of them really started talking about Studiosity and how they'd used it in order to develop those skills.

Because, again, they're on a short course, really. I mean, it's only sort of a year and a half and they've got this really huge development need in terms of that. They're writing. It's not their knowledge, abilities, etc. it's about developing those writing skills. So they are engaging with the learning centre and what's available there. But they were talking about how useful Studiosity was for them in helping them to develop and get feedback on those writing skills as they transfer. So it's another transition element, particularly those students who'd got undergraduate degrees rather than postgraduate degrees from their home countries.

Those that got postgraduate graduate degrees tended to have more experiences of extended writing, etc., and were more confident in their writing. But it was those with the undergraduate degrees that were really feeling a bit shaky because they didn't know what was expected of them and they were finding Studiosity useful in that domain. Staff focus group 1.

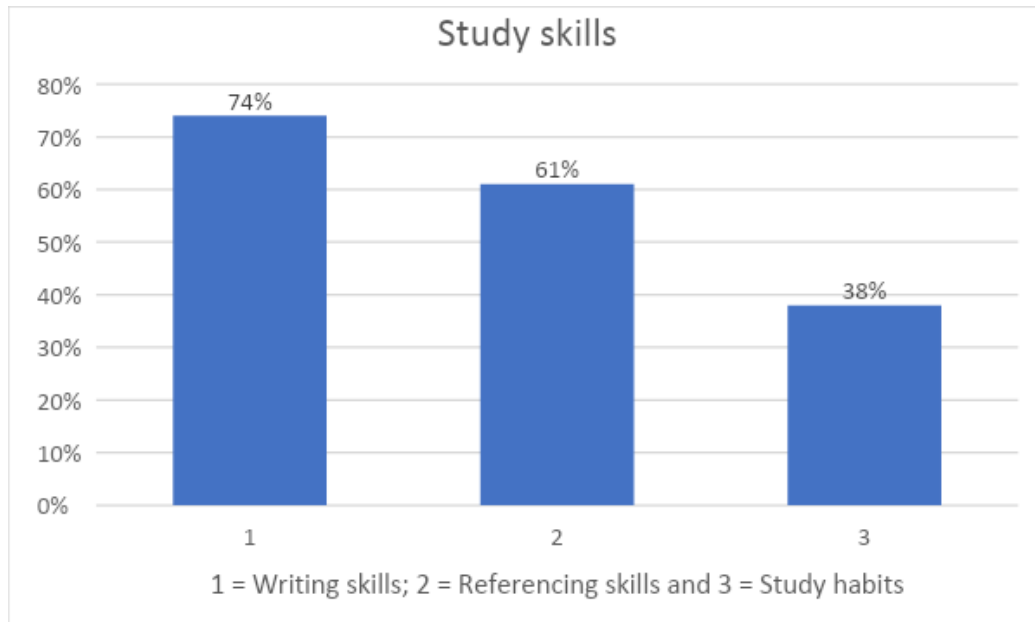
There is less evidence available about the specific skills that students have developed.

Brodie et al (2021) state that students reported developing their understanding of academic writing. Dollinger et al (2020, p6) writing in the Australian context and drawing on a small survey about students' perceptions of their development of writing and referencing skills and study habits, which includes students' ability to organise their thoughts, and make a work-plan. The findings and results are reproduced in the table 5 and chart 13 below.

Table 5: Skills students developed from Studiosity (Dollinger et al 2020)

Skills	Writing skills	Referencing skills	Study habits
Number	28	23	14
Percentage	74%	61%	38%

Chart 13: Students' study skills developed by using Studiosity



In the focus group discussions, it was noted that using Studiosity develops their wider skills, such as planning, time management and independence.

I think from our perspective, it's helping with their life skills as well as their academic skills, in that once they get into the rhythm of using it, then their planning the time better, thinking more effectively.

This helps with things like timekeeping, if you can submit it in good time, you'll get some feedback. You can take that, you can work on this. So, it's kind of part of also trying to instil that independence in them, which is ideally what we want.
Staff focus group 3.

Karen Blakey, Academic Manager at Auckland Institute of Studies (a private tertiary education provider in New Zealand) also suggests that students are developing wider skills by engaging with Studiosity. She writes:

There are also other benefits from engaging in a range of learning support services, such as developing the skills required to enable them to become critical thinkers and problem solvers which employees of today are expecting from their employees, making graduates of today work ready employees.
(Blakey, 2019)

Developing an understanding of academic integrity was identified quite frequently in the focus groups and interviews, and is discussed next.

Academic integrity

The Deputy VC at NRU draws attention to the role that Studiosity plays in developing academic integrity. He opines that the writing feedback service develops students' understanding about how to cite and reference, and develops their confidence in their own ability to undertake academic writing without needing to either unintentionally or deliberately resorting to plagiarism or other forms of academic misconduct. This opinion is informed by research with international students in particular.

A similar claim is made by Karen Blakey (Academic Manager at Auckland Institute of Studies, 2019):

Auckland Institute of Studies (AIS) has a large proportion of international students whose first language is not English. These students enrol in programmes of study that can pose some challenges for them, particularly in relation to English language skills, teaching style and plagiarism....

Plagiarism is a serious concern in education and students often do not understand what plagiarism is and therefore do not know how to avoid submitting work that has been plagiarised. This can be very true for international students who have been educated in a more didactic approach and where plagiarism may never have been addressed.

Motivation

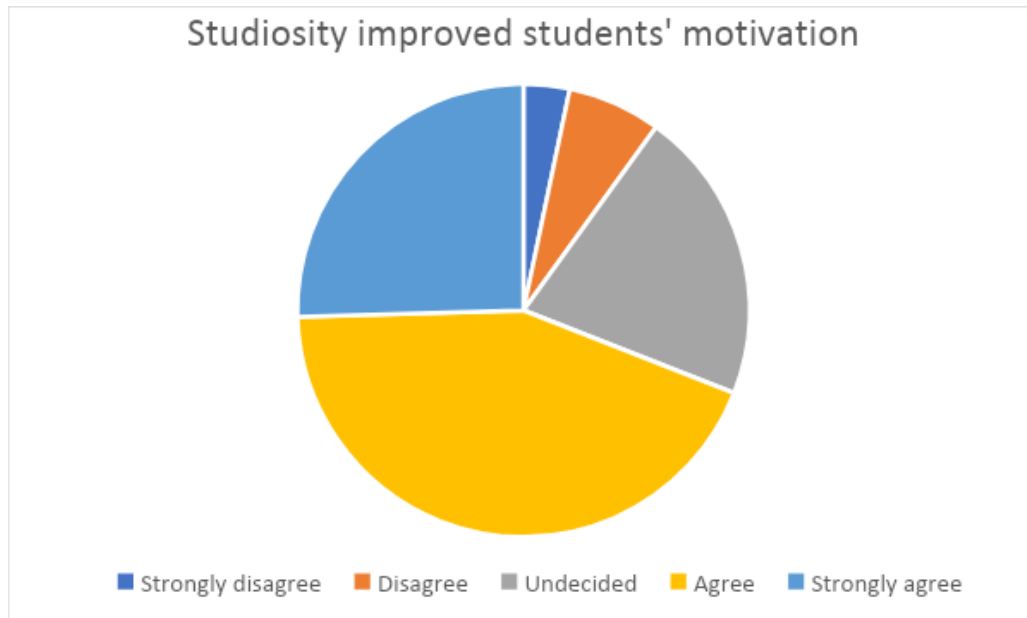
Developing students' confidence and skills may contribute to improving students' motivation. In the UK report on the impact of Studiosity on the student experience (Thomas 2019) found that the majority of students (69% of 419 responses) thought that Studiosity had improved their motivation.

These results are reproduced in table 6 and chart 14 below.

Table 6: Studiosity improve motivation

Response	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Number	13	28	88	183	107
Percent	3.3%	6.7%	21.0%	43.7%	25.5%

Chart 14: Studiosity improves motivation



Brodie et al (p10, no pagination) find that 'motivation' is widely commented on in the student feedback, and occurred in the comments more than 500 times. Motivation did not occur as a significant theme in the focus group discussions however.

Wellbeing

Around a third of UK students (32%) report their wellbeing as poor or very poor, and 54% feel stressed by studying at least once per day, and only 30% feel comfortable studying alone. 48% of students think that access to 24/7 study support would combat study stress, and 74% have access to 24/7 study support and use it, or would use it if they had access to it (Red Brick Research Agency, 2021). In view of this context, it is perhaps not surprising that staff in the focus groups discussed how Studiosity contributes to wellbeing as it quickly provides reassurance and reduces anxiety. They noted that some students are perfectionists, which fuels anxiety, and so being able to access a writing and study feedback service quickly and at any time of the day is valuable. The evidence presented in the next section suggests that Studiosity does more than relieve anxiety, it seems to contribute to better mental health. This theme is discussed more fully in section 8.

8. Student outcomes in the medium-term

The previous section has explored how staff expect Studiosity to benefit students around the time they use the service, and has collated the available evidence to corroborate the extent to which these benefits have been evaluated and proven. In this section the focus shifts to the

‘medium term’, i.e. the extent to which the benefits of using Studiosity endure, and continue to be advantageous to users. In a previous report it was concluded that:

Studiosity is developing the capacity of users to be effective independent learners, who are more satisfied with their university learning experience, and who have higher levels of well-being than the general student population. (Thomas 2019, p4).

Some of the benefits staff identified in the focus groups, or that universities hoped would be achieved for their learners, will not occur immediately, but over time. Indeed, some of these impacts have been identified as longer-term impacts, such as increased completion, degree attainment and the closing of differentials between student groups, and are discussed in section 9. Rather this section focuses on ‘intermediate’ indicators, that suggest that the hoped-for longer-term impacts are insight. (As discussed in section 4).

Improvement (application of skills to future assignments)

Brodie et al (2021) identify ‘positive improvement’ as one of the outcomes of Studiosity, which they define as ‘students indicating they will also apply what they have learned to both current and future work’ (p14). Applying the learning in the future is key to student development and longer-term success. There is limited evidence that verifies whether or not students do apply their learning from Studiosity in relation to one assignment to future assignments, other than students’ reported intentions.

Thomas (2019) found that more than 80% of students said that they had learnt ‘a lot’ or ‘a reasonable amount’ since using Studiosity, while only 6.4% said they had learnt ‘not much’ or ‘nothing’. The report explores the extent to which students feel that the Studiosity Specialists’ feedback is clear, relevant, enables students to take responsibility for their own learning, can be applied to future assignments and motivates them to do their best work.

If these criteria are met then it suggests that students are not just accessing help to enable them to pass the current assignment, but rather they are developing their capacity as effective learners in higher education. Thus, the evaluation provides evidence of the extent to which Studiosity is supporting students to move beyond being surface learners, and facilitating them to become deep and effective independent learners. (Thomas 2019, p6)

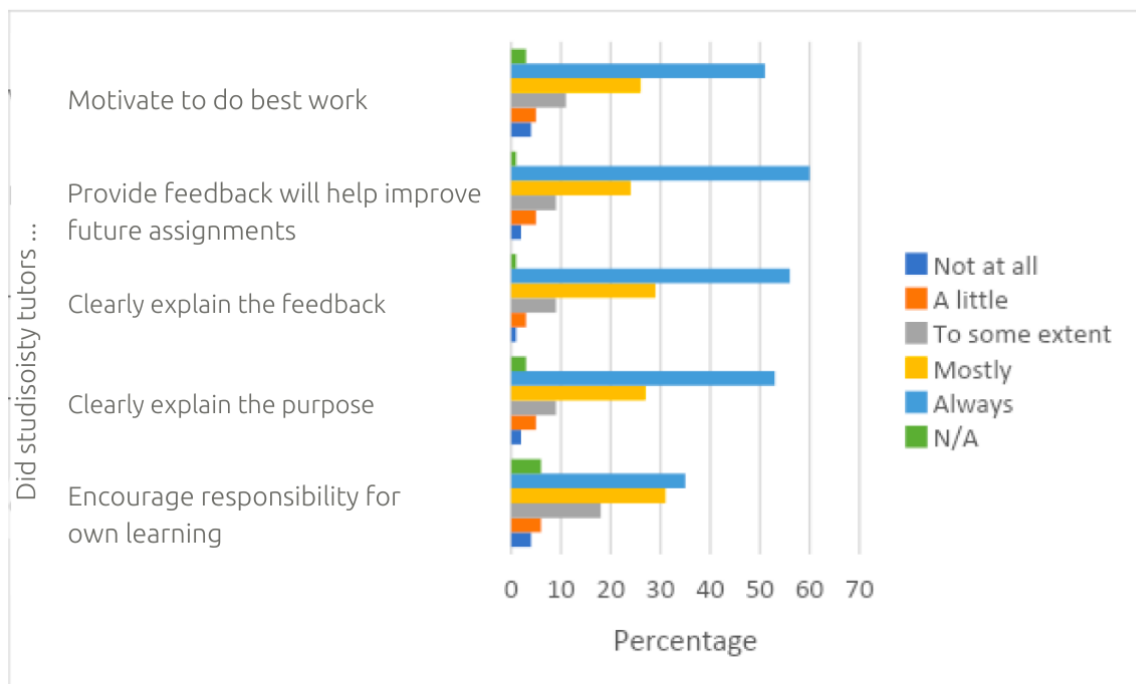
The findings from this study of particular note with respect to ‘improvement’ are:

- The majority of students (85.7%) felt that the Studiosity specialists always or mostly explained feedback clearly, and 85.4% of students felt that feedback was relevant mostly or always.
- The majority of students (89.7%) felt that Studiosity specialists had explained the purpose of the service clearly to them at least to some extent.
- The majority (84.4%) felt that Studiosity specialists encouraged them to take responsibility for their own learning always, mostly or to some extent.
- The majority (93.1%) of students felt that Studiosity specialists provided feedback that would help them improve future assignments.

- The majority of students (87%) said Studiosity Specialists motivated them to do their best work at least to some extent.

These findings are summarised visually in chart 15.

Chart 15: The quality of Studiosity Specialists



Dollinger et al's (2020) small study supports these findings, in terms of students' perceptions: 70% of students (n = 27) 'agreed' or 'strongly agreed' that they would get a higher grade because of the feedback they received from the online tutoring service.

Benzie and Harper (2020 p643-644) warn however that 'the third-party products discussed here cannot be used to outsource or automate the full range of student writing development required in higher education disciplines'. But rather discipline-based staff must work with students to help them apply the learning from services such as Studiosity:

For these products to be of value, universities must help students to discern the relevance of the advice to the disciplinary context in which they are studying. This means enabling lecturers to become familiar with the advice offered by the products so they can make pointed recommendations about what to use and how to use it, or incorporate use of the tools into their teaching.

Increased submission of assessments and improved attainment

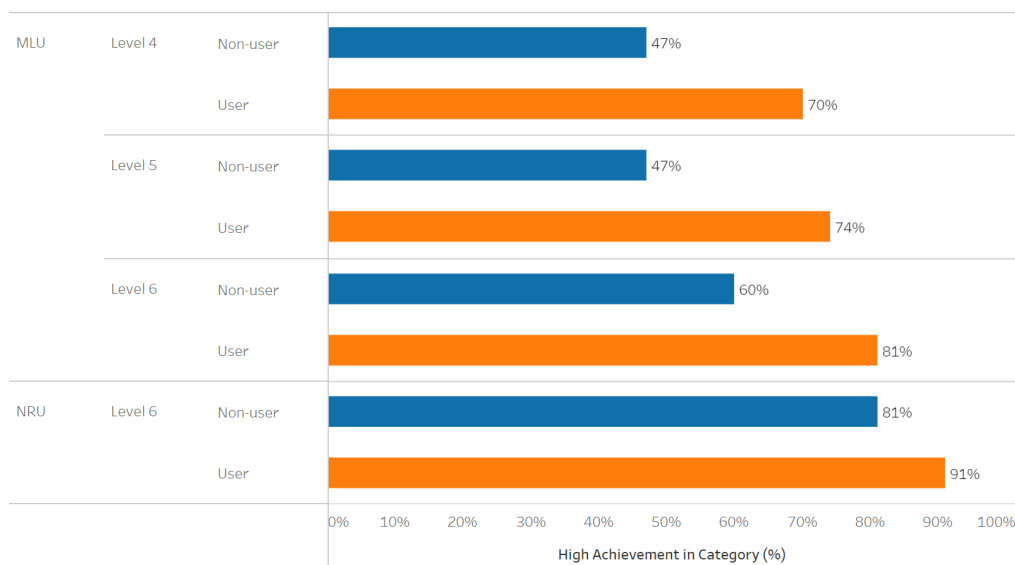
While there is little explicit evidence, beyond students' feedback and intentions, that they apply the skills in the future, there are two indicators that might be taken to demonstrate learner development: increased submission of assessments and improved attainment.

- Dollinger et al (2020, p6) found that 45% of students reported that the online service had a positive impact on their submission of assignment on time (n = 17)
- NRU states that the internal data dashboards show a correlation between using Studiosity and higher attainment.
- Blakey (2019) states that students who engage in the use of Studiosity, do progress better in their studies with less reported incidences of plagiarism, and an increase in confidence levels in their abilities to succeed.

The correlation between using Studiosity and higher attainment is found in each of the case study institutions, and across diversity groups.

- **MLU attainment:** 70% (444 out of 638) of Studiosity users at level 4 achieved High Attainment, compared with 47% (1902 out of 4015²) of non-users and the pattern was similar for level 5, with 74% (387 out of 522) of users achieving High Attainment, compared with 47% (1613 out of 3417) non-users. Failure rates were low for users at both levels, with 3% (19 out of 638) of users failing at level 4 (compared with 18% non-users) and 1% (7 out of 522) at level 5 (compared with 14% non-users).
- **NRU attainment:** 91% (728) of users at Level 6 achieved High Attainment, compared with 81% (3,833) of none-users. Data was not provided for Level 4 and Level 5.

Chart 16: Overall High Attainment by Institution & Level for Users & Non-users.

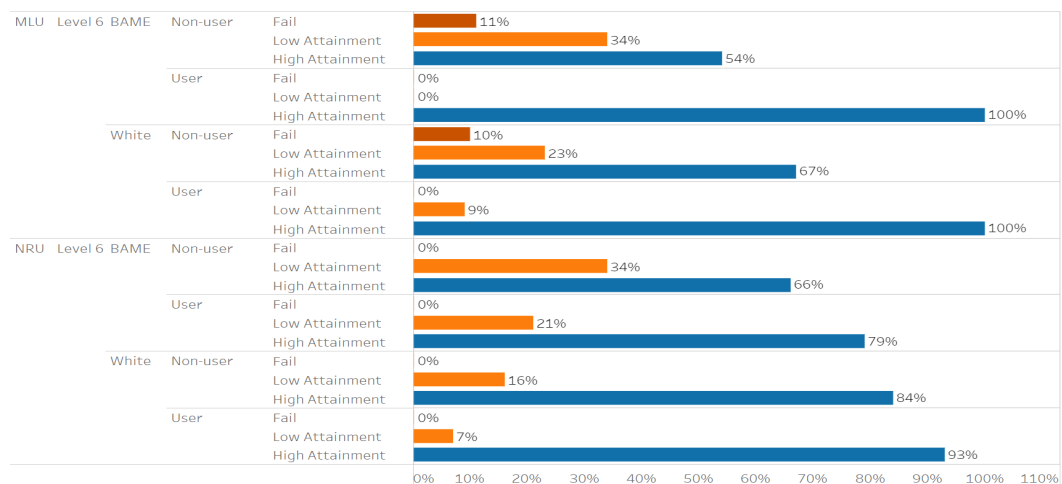


² The total figure for attainment is lower than for completion and progression, as some attainment data was suppressed where numbers were particularly low, in order to ensure no individual student result was identifiable from the data.

Chart 16 shows that being a Studiosity user is correlated with high achievement. This pattern of Studiosity users achieving higher attainment and lower failure rates is true across categories of specific characteristics and across levels.

For example, we have comparison for Level 6 students at MLU and NRU and can see (Chart 17 below) that this trend is observed at both institutions; and indeed, the differentiation for black, Asian and minority ethnic students is more pronounced than for White students when comparing user and non-user outcomes (but note that sample size for users 9 ethnic minority, 13 White), compared with non-users (1876 and 1469 respectively). A chi-square test of association comparing numbers of students achieving High Attainment and those that did not for users and non-users shows a significant difference between groups at Level 4 (χ^2 (df=1, N=4653)= 107.8, $p<0.01$), Level 5 (χ^2 (df=1, N=3939)= 130.3, $p<0.01$) and Level 6 (χ^2 (df=1, N=3909)= 4.2, $p=0.03$). This is discussed further in section 9 focusing on closing equity gaps.

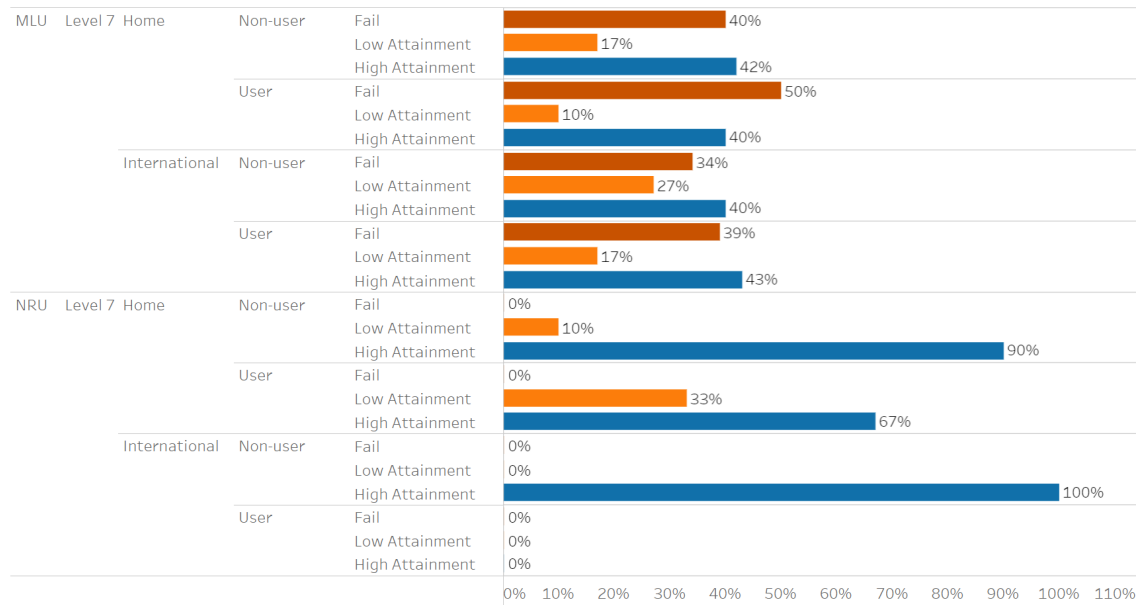
Chart 17: Overall Attainment by Institution & Ethnicity for Level 6 Users & Non-users.



This pattern is also true when comparing students of different gender, POLAR quintile and IMD quintile. The only notable exception to this trend was when comparing Home with International students at Level 7 (see Chart 18 below): in both universities, there was little differentiation between users and non-users, with some comparisons in favour of non-users; this might suggest that the weaker students are accessing additional support, and in a one year postgraduate taught programme they are not able to 'catch up' with other students.

Overall, however, the data points to a positive correlation between better attainment and use of Studiosity.

Chart 18: Overall Attainment by Institution & Fee Status for Level 7 Users & Non-users.



Increased student satisfaction

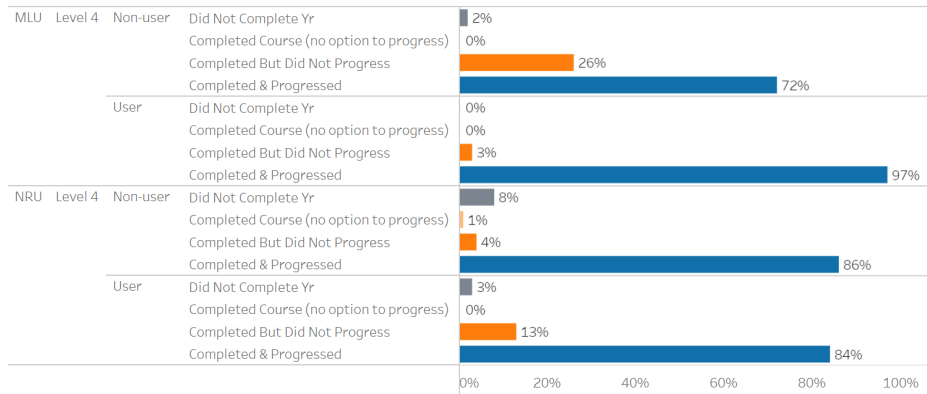
Another way in which the enduring nature of the impact of Studiosity can be measured is by looking at student satisfaction. Thomas (2019) asked Studiosity users to answer questions from the National Student Survey (NSS) about their experience of their course in general. These results showed that Studiosity users who are full-time students have a higher level of satisfaction with their course than the student population as a whole in relation to NSS question 27, and in relation to all of the questions about Assessment and Feedback, and most questions about Academic Support on their course. (Thomas 2019, p8). This may indicate that Studiosity improves student satisfaction, and is worthy of further exploration as both a medium-term outcome and longer-term impact.

Improved continuation and progression

In the UK data, continuation refers to students completing the year of study, and progression data requires students to not only complete the year, but to enrol in the following year as well. This section of the report primarily draws on the case study information.

At MLU, the pattern overall was that Studiosity users were more likely to complete their course and progress compared with non-users, with the differential being quite large in many cases. In contrast, at NRU, the trend was that non-users were slightly more likely to progress. However, we also note that a higher proportion of non-users did not complete the year at NRU than users. These trends are illustrated in Chart 19 below, which summarises overall completion and progression rates for Level 4 students. The tentative conclusion here is that at MLU, use of Studiosity raises overall progression rates; whereas at NRU, it helps more students to complete the course, although they don't necessarily progress, because as section 6 demonstrates a higher proportion of NRU students from diversity groups use Studiosity, and these groups have lower rates of continuation (OfS 2022).

Chart 19: Overall Completion & Progression by Institution at Level 4 Users & Non-users.

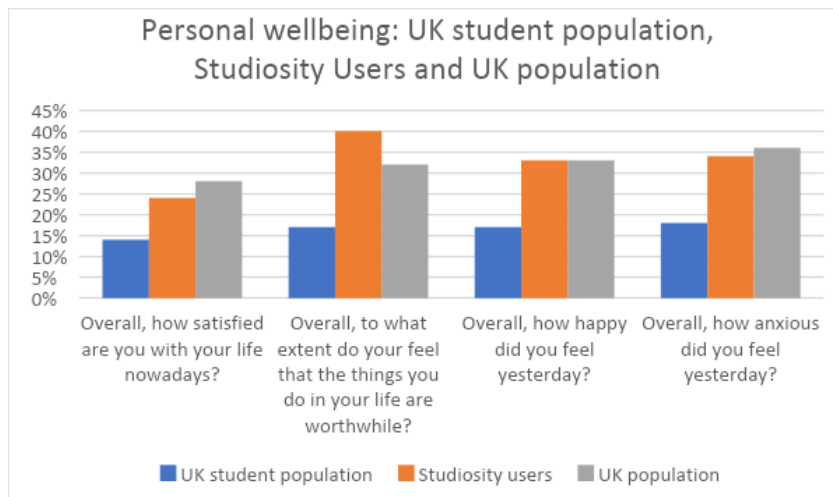


This data is discussed in relation to student characteristics in section 9 focusing on closing equity gaps. Review of UK data previously, (Thomas 2020b), drawing on data from 2018-19, found that in the six universities for whom data was analysed, for all the student continuation rate was higher amongst Studiosity users than the non-users, and this difference was significant in three institutions. Similarly, in four of the five universities that provided progression data, the progression of Studiosity users was higher than the progression of non-users of Studiosity, and in three of the institutions the difference is significant.

Better mental health

Improved wellbeing was identified as a short-term benefit in the previous section. Thomas (2019) explored this further by using the four personal well-being questions developed by the National Office for Statistics, and comparing Studiosity users with the UK population as a whole and with the UK student population. While students generally have worse personal wellbeing than the UK population as a whole, using Studiosity appears to improve wellbeing on all for the NSO indicators. Thus, improved student mental health and wellbeing might be an intermediate outcome of Studiosity.

Chart 20: Studiosity improves wellbeing



9. Student Longer-term impact

This final section of the report addresses the impact of Studiosity in the longer-term, on students' completion, degree attainment and equity gaps. These are the issues identified in institutional Access and Participation plans, and are likely to be important impact indicators for institutions investing in Studiosity. Continuation and progression has been discussed as a medium-term outcome in section 8, and completion of the target award is perhaps a better indicator of longer-term. Similarly, submission of assessments and attainment within each level has been addressed as a medium-term outcome in section 8; while overall degree (or award) attainment would be a useful longer-term impact indicator and is considered here. Strictly speaking the closing of equity gaps could take place within a single year or level, and across the award. The indicator is included here as that feels more appropriate, as it is an indicator at the programme or institutional level, rather than the individual student level. On the other hand, student satisfaction and mental health, which are discussed in section 8, could be understood as the primary reasons for partnering with Studiosity, and so could be considered a longer-term impact (overarching goals). Suffice to say, the evaluation framework template in section 13 can be edited to reflect the needs of specific institutions and contexts.

Completion

Completion of the target award is a useful indicator of longer-term impact, but no evidence in the UK or internationally has been examined to test the contribution of Studiosity to completion. The continuation and progression data reported in section 7 indicates that Studiosity may improve continuation and progression rates. It would be relatively easy to collect completion data, and institutions should consider examining the contribution of Studiosity to degree completion rates.

Degree attainment

A very important indicator of longer-term impact of Studiosity would be degree attainment, as distinct from attainment in a particular level. The two case study institutions provided attainment data for each level, allowing comparison between the attainment outcomes of Studiosity users and non-users for each level, but not degree attainment. An examination of the level 6 data, taken as a proxy here for degree attainment.

At MLU 81% (22 out of 27, a relatively small sample size) of level 6 Studiosity users were High Attainment compared with 60% (2030 out of 3382) of non-users. A chi-square test of association comparing numbers of students achieving High Attainment and those that did not for users and non users shows a significant difference between groups at Level 6 (χ^2 (df=1, N=3909)= 4.2, $p=0.03$).

At NRU 91% (728 out of 804) of level 6 Studiosity users were categorised as 'high attainment: good honours – 1st/2:1' (as opposed to 'low attainment: 2:2/3rd/pass' or 'fail'), compared with 81% of non-users (3833 out of 4751). The remaining students fell into the category of 'Low Attainment', with none of the students failing the course. Overall, at Level 6, Studiosity users are more likely than non-users to achieve High Attainment. A chi-square test of association comparing

numbers of students achieving High Attainment and those that did not for users and non users shows a significant difference between groups at Level 6 (χ^2 (df=1, N=5555)= 44.9, $p<0.01$).

Equity: Closing outcome gaps between student groups

In addition to improving student outcomes, such as continuation or completion and attainment, this section considers if the gaps in outcomes between students from specifically targeted groups and more advantaged groups are closed by using Studiosity. This analysis indicates that it can tentatively be suggested that Studiosity contribute to closing equity gaps.

Attainment/Awarding gaps

Focusing on Level 6 student attainment, where we have a good sample size for both case study universities, and which is the final undergraduate year, it is possible to make tentative claims for the use of Studiosity to contribute to the closing of the awarding gaps for various subgroups. Table 7 takes information presented in Chart 21, and compares the awarding gap between White and ethnic minority students who are Studiosity users and non-users.

Table 7: Attainment/awarding gaps between White and ethnic minority students at level 6 for Studiosity users and non-users

Institution/ Group	White	Black, Asian and minority ethnic groups	Gap (percentage points)	Effect on gap
MLU Non-user	67%	54%	13 pp	Gap eliminated
MLU User	100%	100%	0	
NRU Non-user	84%	66%	18 pp	Gap reduced
NRU user	93%	79%	14pp	

At MLU, the gap between black, Asian and ethnic minority non-users (54% High Attainment) and White Non-users (67%) is a 13%-point gap, while for users this gap disappears, with 100% High Attainment for each group (please note however that the number of users here was low, just 9 black, Asian and minority ethnic and 13 White). At NRU, the gap closes from 18% points (66% High Attainment black, Asian and minority ethnic group compared with 84% High Attainment White), to 14% points (79% black, Asian and minority ethnic and 93% White). As such, it can tentatively be suggested Studiosity use may contribute to closing the awarding gap for between White and ethnic minority students.

Chart 21: Overall Attainment by Institution & Ethnicity for Level 6 Users & Non-users.

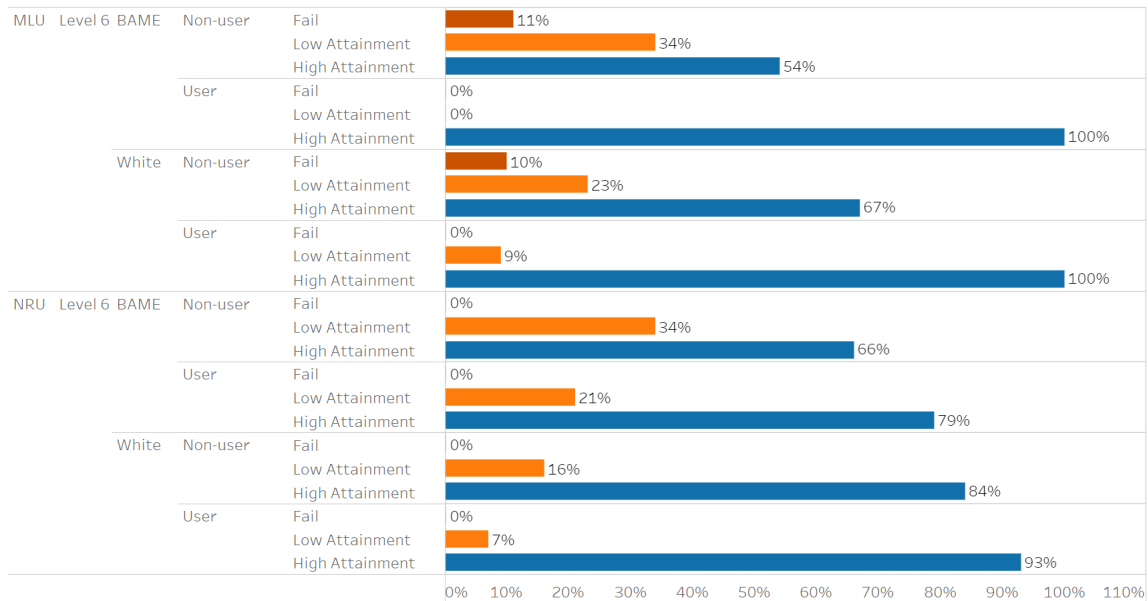


Table 8 takes the data presented in Chart 22 and compares the awarding gap between home and international students, for Studiosity users and non-users.

Table 8: Attainment/awarding gaps between home and international students at level 6 for Studiosity users and non-users

Institution/Group	Home	International	Gap (percentage points)	Effect on gap
MLU Non-user	61%	50%	11 pp	N/A*
MLU User	81%	N/A*	N/A*	
NRU Non-user	82%	61%	21 pp	Gap reduced
NRU user	91%	80%	11pp	

* No international level 6 students used Studiosity at MLU in 2020/21, so the gap cannot be calculated.

This shows that international students that used Studiosity at NRU had 80% High Attainment, compared with 91% for home users. This remains a gap of 11% points, but is smaller than the gap of 61% High Attainment for international non-users and 82% of home non-users (a 21% point-gap). As there were no international level 6 users at MLU, we cannot compare the data for this institution.

Chart 22: Overall Attainment by Institution & Fee Status (home and international) for Level 6 Users & Non-users.

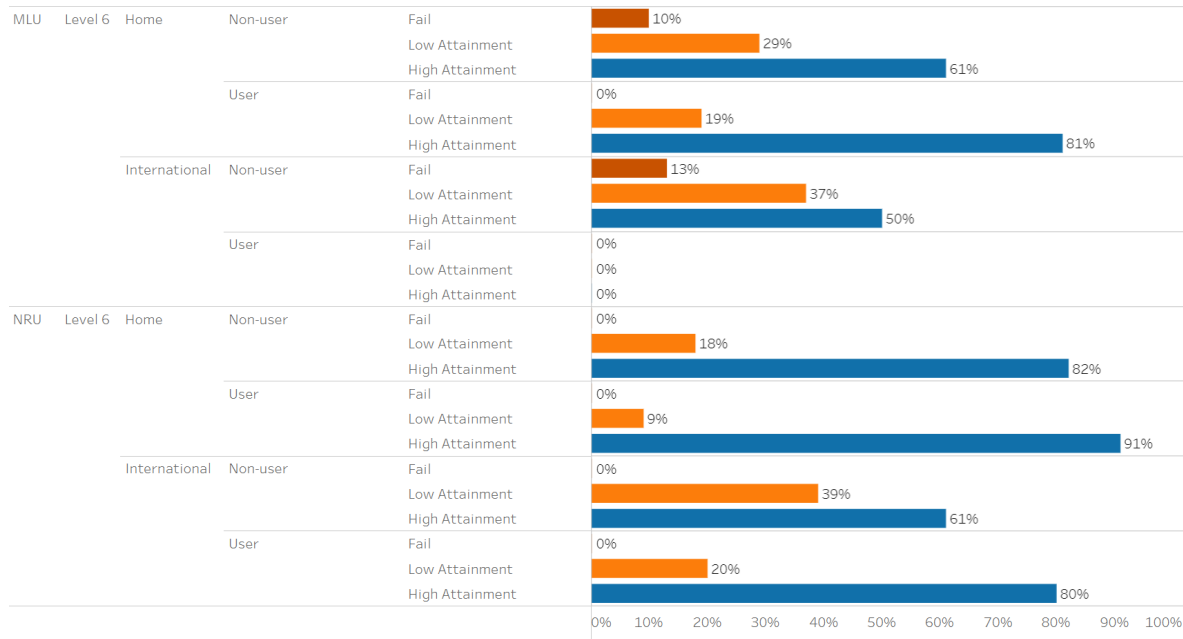


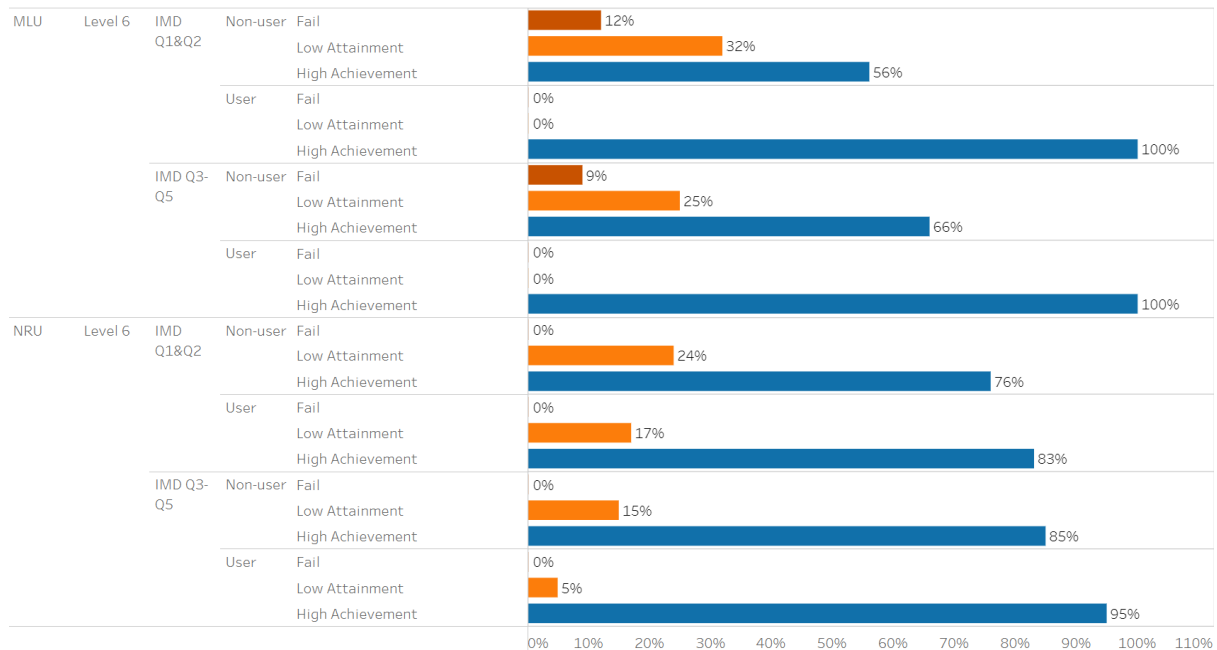
Table 9 takes the information presented in Chart 23 and considers the awarding gap between students from higher and lower socio-economic groups (based on the Index of Multiple Deprivation), and how it differs between Studiosity users and non-users.

Table 9: Attainment/awarding gaps at level 6 between IMD Q3-Q5 and IMD Q1&Q2 for Studiosity users and non-users

Institution/Group	IMD Q3-Q5	IMD Q1 & Q2	Gap (percentage points)	Effect on gap
MLU Non-user	66%	56%	10pp	Gap eliminated
MLU User	100%	100%	0	
NRU Non-user	85%	76%	9pp	Gap increased
NRU user	95%	83%	12pp	

This shows that between non-users at MLU, there is a 10%-point gap between High Attainment for non-users at IMD 1&2 (56%) and IMD 3-5 (66%), but this gap disappears for users, where both groups had 100% High Achievement. At NRU, the gap between non-users was 9%-points, with 76% High Achievement at IMD 1&2 and 85% IMD 3-5; however the gaps widens slightly for users, there the gap is 12% points, with 83% High Achievement for IMD 1-2 and 95% for IMD 3-5. The reason for this is unknown, but may relate to NRU reaching more-disadvantaged students.

Chart 23: Overall Attainment by Institution & IMD Quintile for Level 6 Users & Non-users.



Continuation gaps

Turning to the progression data gaps (as we do not have completion data), the institutional data from the case study institutions suggests that Studiosity is correlated with improved continuation and progression at MLU, and improved continuation at NRU. These patterns are replicated for students with specific characteristics, and can be used to demonstrate the extent to which Studiosity is correlated with, and may be contributing to promoting equity by closing gaps between student groups (Tables 10, 11, 12 and 13 and Charts 24, 25, 26 and 27). As discussed above, the progression gaps may have increased at NRU as more students are being enabled to complete the year and accrue the credits, but other issues prevent them from progressing to the next year of study. They will however be better placed to return to higher education, than if they failed to complete a level.

Table 10: Level 5 progression gaps between White and ethnic minority students for Studiosity users and non-users

Institution/Group	White	Black, Asian and ethnic minority	Gap (percentage points)	Effect on gap
MLU progression non-user	97%	78%	19pp	Gap reduced
MLU progression user	100%	97%	3pp	
NRU progression non-user	88%	85%	3pp	Gap increased
NR progression user	87%	76%	11pp	

Chart 24: Completion of level 5 and progression to level 6 by ethnicity for Studiosity users and non-users

Ethnicity: Completion, Progression

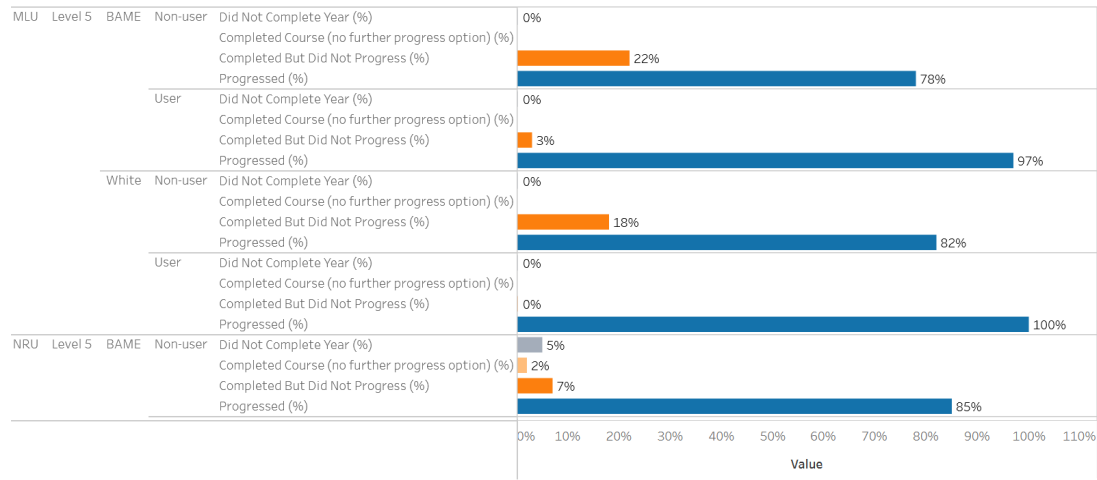


Table 11: Level 5 progression gaps between Home and International students for Studiosity users and non-users

Institution/Group	Home	International	Gap (percentage points)	Effect on gap
MLU progression non-user	80%	72%	8pp	Gap eliminated
MLU progression user	98%	100%	-2pp	
NRU progression non-user	87%	74%	13pp	Gap increased
NR progression user	85%	67%	18pp	

Chart 25: Completion of level 5 and progression to level 6, home and international students, users and non-users

Fee Status: Completion, Progression

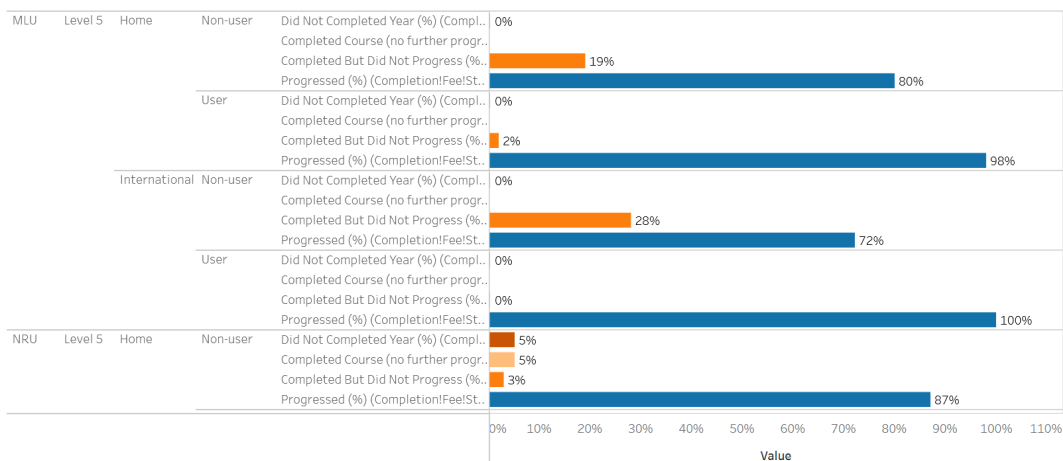


Table 12: Level 5 progression gaps between higher and lower socio-economic status (POLAR4) for Studiosity users and non-users

Institution/ Group	POLAR 4 Q3-5	POLAR 4 Q1 & Q2	Gap (percentage points)	Effect on gap
MLU progression non-user	80%	81%	-1pp	No gap
MLU progression user	98%	100%	-2pp	
NRU progression non-user	88%	86%	2pp	Gap decreased
NR progression user	85%	84%	1pp	

Chart 26: Completion of level 5 and progression to level 6. POLAR 4 quintiles and Studiosity users and non-users

POLAR Quintile: Completion, Progression

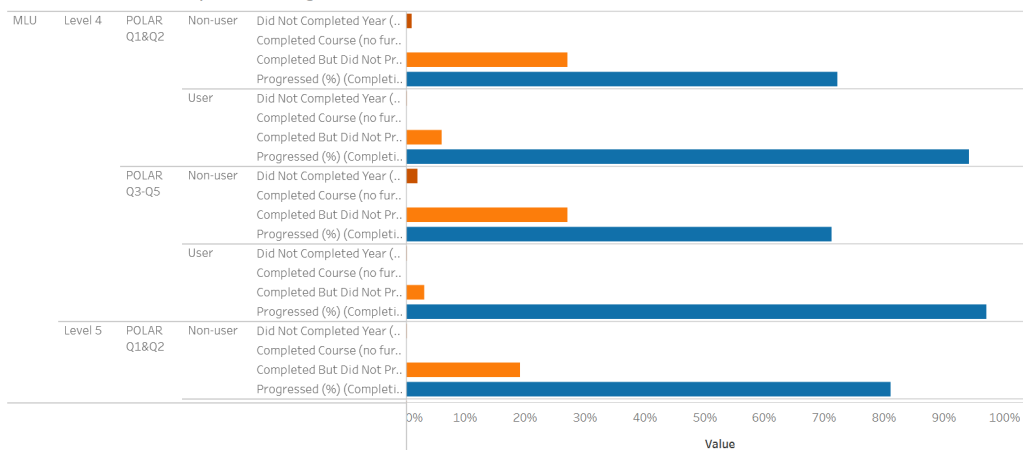
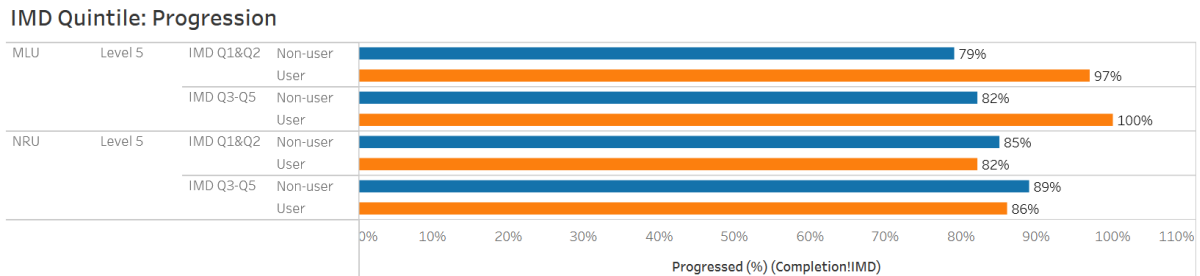


Table 13: Level 5 progression gaps between higher and lower socio-economic status (IMD) for Studiosity users and non-users

Institution/ Group	IMD Q3-5	IMD Q1 & Q2	Gap (percentage points)	Effect on gap
MLU progression non-user	82%	79%	3pp	Gap unchanged
MLU progression user	100%	97%	3pp	
NRU progression non-user	89%	85%	4pp	Cap unchanged
NR progression user	86%	82%	4pp	

Chart 27: Completion of level 5 and progression to level 6, IMD quintiles and Studiosity users and non-users



Overall, there is evidence that Studiosity may be contributing to closing and eliminating awarding gaps between students with different characteristics; there is also evidence about improving continuation rates and closing gaps, but in relation to progression gaps the picture is less clear. These findings certainly warrant further investigation by institutions using a more rigorous methodology (Crawford et al, 2017).

10. Staff experience and benefits

We're such a small team for a university of our size and intake and there's only so much you can physically do. So, it's nice to have Studiosity, in a sense as, a net to catch people that possibly can't always see us when they need to. And it's nice for staff to be, you know, staff on courses to be able to refer students because I suppose it takes the heat off them a little bit. Staff focus group 4.

The focus groups were designed to understand more about the experience of staff, and how they perceive the benefits of Studiosity to themselves and to students. Perhaps unsurprisingly, all the staff that participated in the focus groups were positive about Studiosity, although some did acknowledge that they hadn't always been, and that not all staff are supportive, either initially or now. The pilots and the sharing of evidence have however contributed to staff both academic and professional service staff becoming more supportive.

Academic staff

The focus groups involved both academic and professional service staff. The ways in which the discussions identified academic staff as benefiting were:

- Being able to refer students to Studiosity saves teaching staff and personal tutors/ academic advisers time, reduces workload, and prevents them from feeling obliged to undertake additional roles, such as additional formative feedback and proofreading.
- Having a service staff can refer students to is particularly useful for academic staff who do not have the skills or experience of correcting writing, and it saves them time searching for academic resources for them to use or to refer students to.
- Providing students with feedback on their writing helps to level the playing field between students, and reduces anxiety for students, both of which benefit staff.
- Studiosity enables staff to focus on marking the contents, and their feedback is focused on academic matters rather than writing issues.

Staff acknowledge that many students study in the evenings and weekends, and want support during these periods. Being able to sign-post students to an out of hours service relieves the pressure on staff, and contributes to the wellbeing of students, especially those who get stressed about their studying, including 'perfectionists'.

I would say from a well-being perspective, at least, it gives us somewhere that we can signpost. And from the students we work with, they will probably be the students that are working between 5 p.m. and 10 a.m... So, for us it's more of an excellent signposting opportunity.... It helps with things like perfectionism, anxiety, all those kinds of things, because they feel like they can get an answer to whether their work's okay before it's given to us.... So for us, it's a nice way to reduce our pressure by giving them the skills externally. Staff focus group 2.

- An institutional manager of Studiosity explained that when Studiosity was introduced s/he spent a significant amount of time engaging academic staff to understand Studiosity and overcome any concerns. Many of the advantages to academic staff stem from the service being available out of hours.

I think the key thing about Studiosity was the 24/7 access that students had, and the inclusive nature of it. So, you know, when they couldn't access an academy, or get to office hours, then they knew that Studiosity was there... It doesn't take away their role as academics at all. It's just another package of support that's there for students.

Another contribution makes a similar point:

I knew I was going to win the battle because one of the teachers who was most against it described an occasion where somebody had come up to them at 9:00 [in the evening after evening teaching]... somebody came with their assignment in their hands, 'Please, can you give me some feedback?' And he said, 'Submit it to Studiosity'. And it was at that point that I knew I was going to roll it out. So it really helps us with students who need feedback, but it's not desperation stations. The workload is lighter because we can direct them to Studiosity. Staff focus group 5.

One focus group participant said that they had been against Studiosity initially, but they had been partly won around by the argument that some staff do not have the skills to provide constructive writing feedback:

The only other thing to add was my boss said, and I did take it on board when I was kicking off about it, and saying I thought this [Studiosity] is a dreadful idea. He said, 'Well, that's all very well for you because you have the skills to correct the students.' But he said, 'not all of our academic staff have the skills to correct the students in terms of either their literacy or actually their understanding of referencing'. And I think because I came from the humanities, you know, it's a very particular kind of discipline. But actually that is true. And when I look across the university more widely from a central position, I see that that is true. There are a lot of staff who do not understand, referencing in any way, a lot of staff who don't actually have a very sophisticated grasp of the English language and how to correct written English, actually. And there's a way in which the support that is given through Studiosity is something that actually sometimes

our academic tutors can't deliver. So they might know their subject knowledge, but they don't actually know a great deal about writing. Staff focus group 3.

For academic staff, being able to refer students to Studiosity can both reduce their workload, and reduce their stress:

And we did have a lot of critical academic staff in the early stages of the project, that thought that this was diminishing the work that they felt that they would be doing with academic students. But we don't have that negativity now. I think there's a lot of evidence to suggest that's stopped, and they find it really valuable. It's helpful for them to be able to hand over these low-level tasks. And I would say that that definitely reduces workload and reduces stress, and that does really stop time for more useful interaction with students. So I definitely think that's a major battlefront that's often talked about. Staff focus group 2.

It is widely acknowledged, in the focus groups, and in the wider literature, that academic staff are important in encouraging students to utilise Studiosity. Where staff are positive and proactively promote the writing feedback service, usage is higher and staff and students seem to be happier. The examples of teaching staff embedding Studiosity into the assessment process (discussed in section 5), demonstrates how academic staff can increase the value of the service to students and to the institution. There do seem to be some different views within specific disciplines. Focus group participants explained how academics in certain disciplines may feel Studiosity is less well suited to the writing needs of their students: law and creative writing were singled out. It was also noted that some disciplines have fewer writing requirements, such as engineering. Whether these views do relate to disciplines *per se*, or whether disciplinary differences are invoked to justify not using Studiosity, is a moot point. In some cases, it seems to be the latter. At one university, one department decided that students shouldn't use Studiosity for their masters dissertations because 'it's got accreditation from a professional body'. The central team explained that 'it's nothing to do with content. It's just language. From a professional body's [point of view], it just has no bearing'. But: 'That did not have traction'.

Professional services staff

Professional services include academic skills and writing development and pastoral support and wellbeing services. Some academic skills and writing development staff have appeared the most initially wary of the introduction of Studiosity, but in the institutions that have piloted and introduced Studiosity more widely, these concerns have dissipated. In summary:

- Academic skills staff recognise that Studiosity offers a way of reaching larger numbers of students than they have the capacity to see, and can deal with more routine writing development issues.
- Introducing Studiosity has resulted in more students accessing academic skills support provided by the university.
- Academic skills staff have found that Studiosity has freed up their time to undertake additional activities, including embedding skills into courses, working with more complex student needs, and developing new areas of work.
- Staff with a wellbeing remit felt that it was useful to be able to signpost students to Studiosity, irrespective of the time of day, especially for students who are anxious.

Quite a few staff identified that Studiosity is able to respond to a much larger number of students than in-house teams are able to do. It is acknowledged that providing writing feedback is time consuming, and difficult to do in relatively short one-to-one sessions.

We also really actively promote it with students... because we are a small team, we just don't have the capacity in that time to be looking at students' work in detail. So, when there's one to one, students are asked to kind of let us know what they want to discuss beforehand, and pick an extract of their work because we can't read the whole thing. And we also really stress to them that we can't help them with grammar and proofreading, because that is such a specific and time-consuming thing to do those 30 minute 1 to 1 appointments. So, we really do promote Studiosity to students as an opportunity to get a full feedback report that goes into detail on those aspects of spelling, grammar, punctuation that we want to be able to do for them. So yeah, that's one way in which we promote it through those sessions with students. Staff focus group 3.

In several institutions, Studiosity is used initially, and then students who either need assistance in understanding and implementing the feedback, or who have more complicated writing development needs, are able to make a 1-1 appointment with centrally-based staff. This enables staff to work on other aspects of their role such as delivering group skill sessions and other more extensive and inclusive activities.

We just wouldn't have the time as a small team to give students the amount of feedback that they're asking for, give them the amount of support that they're asking for with that assignment writing. So Studiosity does allow us to say to use Studiosity the first time, and if they want more support, they can come to us for that. I think for a lot of students, it's enough. They're kind of happy with that...So in terms of the impact on our team's time, it really does free-up. And we don't want to be spending a lot of time in those one-on-one sessions, because I think our goal as a team is to make sure that it's as inclusive as possible. And I think the way to do that is through larger group sessions, rather than devoting hours and hours to 1 to 1, because it's just not sustainable. So Studiosity does just help us with that. Staff focus group 3.

Furthermore, there is some evidence that students engaging with Studiosity will then be more confident to access services provided by the university.

And I must say that even with Studiosity, we have seen so much more traffic to the skill centre over the last two years, so it's not lessened the use of our focus groups and workshops in any shape or form. In fact, I think we've had something like a 64% increase in engagement with focus groups and workshops over the last two years, specifically since we've gone online. We've had better engagement since our service went online. Staff focus group 1.

Encouraging students to engage with other services is built into the Studiosity process, through 'intervention notices'. These identify any concerns about a specific student, and alert the university. One institution noted that several students with learning differences had been identified in this way.

We'll get something called an intervention notice, and that flags in our team inbox; it means that what we do is contact that student [by email]... We just said we're aware that you've recently used Studiosity, are you aware of these additional resources that you could use to build your writing skills and then tailor the resources we gave them to the kinds of things that had been flagged in the report and also in those emails. We would encourage them to book one of those follow up, one to ones with those, but totally kind of, you know, no pressure there. Staff focus group 3.

For other staff who have contact with students it is helpful to be able to refer students for support, whatever time of day, and it reduces the stress of students and staff.

We see it as that reduced anxiety, and we're a lot happier than not having the service and leaving the students stuck. And with these high levels of anxiety, we know when our libraries are open 24 hours, library staff will be having conversations with students in the early hours [and refer them to Studiosity]. And so again, it's about that wellbeing thing that's most important for us. Staff focus group 2.

11. Institutional benefits and returns

In some ways the institutional benefits echo or reinforce the benefits to students – and staff. This section draws these together and also includes some additional returns that were mentioned, and draws attention to the potential returns on investment.

Drawing on comments and evidence from across the case studies, focus groups and wider literature, the following 'institutional benefits' have been identified.

- Improved student experience, satisfaction and outcomes, and closing equity gaps between student groups.
- Generating improvements and evidence in relation to experience, outcomes and equity, to be used in submissions to the Office for students in relation to the Teaching Excellence Framework (TEF) and Access and Participation Plans (APP).
- Understanding more about students' writing and academic support needs, and providing inclusive support and contributing to widening access.
- An effective partnership approach to improving students' learning, and providing a demonstrable return on investment.

The evidence about the ways in which Studiosity contributes to improving students' experiences, satisfaction and outcomes is discussed in previous sections (7, 8 and 9). These echo many of the reasons why higher education providers choose to partner with Studiosity, and what they want from the partnership. Senior staff involved in the review were clear that they had received the benefits expected. One staff member commented that 'students like Studiosity, so it buys happiness'. It also allows the institution to communicate to students that they care about their success, understand the complexity of their lives and are investing in a service to support them.

- One of the additional institutional benefits is being able to refer to Studiosity in submissions to the Office for Students, both as evidence of providing academic support, and to address differential outcomes for specific student groups. We understand that case study institutions have referenced Studiosity in their new Teaching Excellence Framework (TEF) submissions, as a way of demonstrating institutional commitment to supporting students to succeed, and investment in students' learning. Studiosity is also referenced in institutional Access and Participation Plans (APP), which demonstrate how institutions will promote equity between student groups in relation to continuation and attainment (as well as access and progression to employment). As the evidence base grows about the contribution and impact of Studiosity, there are likely to be more universities and colleges turning to Studiosity as a proven way of addressing these issues.

The University of Bedfordshire identifies that working with Studiosity, and undertaking Design Based Research, will allow them to learn more about students' writing and academic support needs, and how the university can support them to study successfully. The University of Bedfordshire identifies itself as 'widening participation institution', with students 'of many different abilities and with a diverse range of backgrounds, and levels of educational experience' (Pike 2022), and as a result 'some students may experience significant challenges transitioning to university education and as they follow their academic journey' (Pike and Aruna 2022). During the focus groups it was noted that Studiosity facilitates higher education providers to provide an inclusive learning experience, and this will encourage more students from non-traditional and diverse backgrounds to feel that they will be supported on entering HE.

One of the pushes that we all make as a university is about access. It's about inclusivity. It's about being able to support differentiated student groups that actually are different, and have varied needs. So that whole kind of inclusive offer... and if we can support differentiated student needs, then students will talk positively about the university, won't they? So, I think there is that kind of wash back... 'Actually, it's really good in terms of how the university supports students, so I'll go and tell my friends.' Staff focus group 1.

Another type of institutional benefit related to the nature of the partnership with Studiosity. Studiosity is frequently integrated into the institutional support offered to students, as discussed in section 5.

I would say that Studiosity is part and parcel of an inclusive offer, and I want to keep it as a partnership and collaboration. I wouldn't want Studiosity taken away from my staff and the work that they do. So, I think it's about an integrated approach to supporting and developing our students. Staff focus group 1.

It appears to be a genuine partnership, providing opportunities to collaborate and learn and develop together, and this is valued by the staff who participated in the focus groups:

I think there's something about collaboration and partnership, isn't there? And so, one of the benefits, I suppose, is about how you work with and collaborate with a third party. And I've done a lot of collaborative work with Studiosity in terms of developing not just the writing feedback service but the other services. I

think that does offer a good return on investment for the university. Staff focus group 1.

Another discussion centred on Studiosity as an 'ethical' partner, and thus avoiding collaboration with partners who may not be offering a genuine service.

I do genuinely think, in terms of the extent that we feel Studiosity is a good return on investment and those sorts of things. I mean, for me, seeing how much unscrupulous activity there is out there, there is a real benefit in having a service that is bought in. And you know, with the early work that we did with them did reassure me about the ethical dimensions... There are now a lot of unethical providers who were positioning themselves to look much more like Studiosity. And I do think that that is a problem: I think that's a problem for us, I think it's a problem for the Studiosity... to distinguish themselves really very clearly from the pirates. Staff focus group 3.

The Nous Group (2022) undertook a return on investment (ROI) study of Studiosity, drawing on the available research evidence, and then developing an approach to assess the ROI. Their findings suggest that Studiosity contributes:

- Increased student confidence with assignments (88%)
- Increased retention (6-16%)
- Reduced failure of units (21%)
- Higher average course grades (15%)

The conclusions from this review are that Studiosity allows HEPs to offer writing development to all students in a relatively cost-effective way. Senior leaders argued that while Studiosity is not a cheap service, they are not able to replicate the service in an affordable way, and so it represents good value for money, and allows them to demonstrate commitment to student success and reach a large number of students.

12. Conclusions, implications and recommendations

The review indicates that HEPs have partnered with Studiosity to achieve a range of goals, and that the way in which they have used and experienced Studiosity differs to some extent, but there are significant commonalities. The findings about usage show variations from around 10-25%; the rate of usage by students with different characteristics seems to vary, with NRU managing to achieve higher rates of usage by students from groups that have lower rates of continuation and attainment.

Staff, whilst initially sceptical, have appreciated the benefits accrued to students, and have identified ways in which both academic and professional staff have been freed up from some aspects of their work in supporting the writing development of large numbers of students who lack confidence or skills. Student benefits are extensive, and include confidence, skills, understanding academic integrity (achieved by developing skills and contributing to increased confidence) and increased continuation and attainment. The different models demonstrated by the two case study institutions warrant further exploration, in particular the merits of targeting level 4 and 5 students to use Studiosity to develop their academic skills, compared to greater use by level 6 students when they undertake an extended piece of independent study. The data

analysis has limitations, as there is not a control group, and is comparing students who have chosen to use Studiosity, with those who have not. It does however suggest that Studiosity can contribute to reducing awarding gaps between more and less advantaged groups of students. The review indicates the need for further evaluation at the institutional level. Building on this review, and to contribute to the need for further evaluation evidence, the Evaluation Toolkit (Thomas 2023b) provides an evaluation framework, together with a blank evaluation template and guidance on how to complete the template. The toolkit can be used by institutions to assess the extent to which partnering with Studiosity is meeting their objectives, and can contribute to the evidence they are able to submit as part of the TEF and APP processes.

Appendix 1: Multi-disciplinary London University (MLU) with a diverse student population aiming to close awarding gaps

Summary

- MLU has a diverse population of 20,000 students, with more than half its students from minority ethnic groups, and more than a third mature students. Undergraduates enter with low to medium tariff qualifications, or non-tariff qualifications. Around 14% are international students.
- MLU introduced Studiosity to reduce awarding gaps, reduce the workload of academic staff, and to be able to provide writing feedback to a large number of students including those who wanted to access a service out of hours.
- A pilot was introduced in 2018/19 before wider roll out; the service is embedded into the institutional support, as an early and first port of call. In addition, study skills are embedded into courses and additional study skills development is available.
- The pilot received positive feedback from students, and reassured academic staff about the value of the service, improving writing, but not interfering with academic content. Academic staff feel that Studiosity allows students to demonstrate their academic understanding better.
- Studiosity has reduced the workload for academic staff (correcting grammar and referencing) and freed up study skills staff to work on other areas of support, relating to transition, embedding study skills and targeted study skills support.
- At MLU the Studiosity usage rate is 12.3% for level 4 and level 5 students; this varies by student characteristics, including lower usage by ethnic minorities, international and male students. Usage rate is lowest for level 6 students.
- Students studying at levels 4 and 5 were more likely to complete their course, progress to the next year and achieve higher attainment than non-users.
- Level 4 and 5 minority ethnic students who used Studiosity were significantly more likely to continue and progress than minority ethnic student peers who did not use Studiosity.
- At all levels ethnic minority Studiosity users have higher rates of attainment than ethnic minority students who do not use Studiosity. For level 6 Studiosity users the awarding gap between White and minority ethnic groups is eliminated.
- Using Studiosity is associated with similarly higher levels of attainment for both home and international students compared to non-users.
- Male students who use Studiosity, especially at Level 4 have higher rates of completion and progression than non-users, and higher rates of attainment.
- Studiosity users from IMDQ1&2 had significantly better rates of completion and progression, and attainment than non-users.
- Students from POLAR4 1 & 2 had higher rates of completion and progression and attainment than non-users.
- The data indicates that Studiosity could be useful in reducing or eliminating continuation and awarding gaps. The next step should be to encourage greater take up of Studiosity by students from groups with lower rates of continuation and attainment than peers, and the implementation of a 'level 3' evaluation (Crawford et al 2017) to assess causation.

Context

This case study focuses on a multi-disciplinary London university with around 20,000 students, herein referred to as MLU. The population is diverse and comparatively disadvantaged. The majority of MLU undergraduate students come from state schools, around half identify as being Black, Asian or other minority ethnic group, and around a third of students are mature. Approximately 60% of students are commuters, and the majority travelling for more than 45 minutes. Many students have complex lives and significant demands on their time, resulting from caring responsibilities and substantial employment commitments. MLU reports comparatively low numbers of home disabled students (less than 10%), and around 14% of undergraduates are international students. Undergraduate entrants are equally split between medium, low and non-tariff entry qualifications. While it is a diverse university, it experiences some challenges around parity of continuation and attainment rates (drawing on OfS data analysed with the APP 2020/21 – 2024/25). The university has set itself targets to improve the attainment of Black students and Asian students (compared to White students), and for students living in areas of multiple deprivation compared to more advantaged students. It is also committed to ensuring positive rates of continuation and attainment for other groups, such as disabled students and commuter students.

Rationale for introducing Studiosity

The University introduced Studiosity in 2018/19. The initial driver for introducing Studiosity was the new PVC for education, who had seen the effectiveness of Studiosity in another institution, and felt it would benefit the University. In particular, three key reasons were identified for the introduction of Studiosity:

- The diverse student population and gaps in attainment (especially for students from minority ethnic groups, part-time and distance learners).
- Academic staff workload: staff were struggling with marking, and felt they were spending a significant amount of time correcting grammar and making sense of the writing, rather than focusing on the academic content of assessments.
- Small academic support service (four full time staff) who could not provide one-to-one support for 20,000 students.

The Access and Participation Plan notes that the Students' Union identified that students would benefit from more out of hours academic development and writing feedback, and that an online 24/7 service would be more accessible to commuter students, parents and those with other responsibilities who are not as able to travel to the campus.

Experience of introducing Studiosity

The PVC encouraged the university to partner with Studiosity, but there were detractors. Some academic and professional staff felt that it might be taking over aspects of their roles, or even their jobs, and some felt it might be 'cheating'. The initial reluctance was countered by planning to undertake a pilot in a single faculty that had low student satisfaction in general, and especially with regards to assessment and feedback.

The pilot found that of the students who used Studiosity, 75% of service were extremely satisfied and 18% were "somewhat satisfied". Students valued being able to access Studiosity in the evenings and weekends (which were the most popular times for the service to be used), and they appreciated the personalised feedback. Furthermore, after using Studiosity these

students were willing to engage with other University services. During the pilot Studiosity identified several additional students with dyslexia and other specific learning needs. Following the pilot, Studiosity was extended to all level 4 students from 2019-20.

The pilot helped staff to get a better understanding of the service. In particular, the pilot demonstrated that Studiosity provides writing feedback and development, and does not infringe upon the role of institutional academics as 'subject specialists'. It also demonstrated that Studiosity is able to provide this level of writing feedback to a large number of students, at a much greater scale than the small Academic Support team could be expected to deliver (unless it was enlarged significantly).

The introduction of Studiosity coincided with the COVID-19 pandemic, which required the Academic Support team to take on new and expanded roles in supporting students to succeed. In particular the Academic Support team led the 'digital onboarding' work, to ensure that new students, who had had a disrupted schooling, including not sitting formal examinations, and who were having to learn remotely in higher education, were supported to adjust to learning in higher education, including the development of essential academic and digital skills. Studiosity freed up staff from the Academic Support team from some of the 'more basic' or routine 1-1 writing feedback work, and enabled them to develop other forms of study support interventions, such as the induction programme for new and continuing students, online skills courses and recorded sessions. In other words, Studiosity freed up these staff to innovate and implement new services and to embed academic skills into courses, and thus to reach more students.

Positioning, availability and promotion of Studiosity

Studiosity is available to all students, but it is particularly targeted at students making the transition into academic learning. Studiosity is one of the services offered to students by the University, and while it retains the Studiosity branding, it is very clearly provided and endorsed by the University. In addition, study skills are embedded into modules, and targeted academic development is available to students. Studiosity is advertised to students from the VLE, and students may be encouraged to use it by teaching staff, tutors, librarians and other colleagues. Indeed, the University actively encourages students to use Studiosity, and for example if a student books a session for academic skills development they are asked about their needs, and they may be signed posted, at least initially, to Studiosity, if this best meets their needs. Positioning Studiosity as both an early and first port of call reflects the fact that the service can be offered to a large number of students, which other Academic Support services do not have the capacity for.

Efforts have been made to embed Studiosity into academic courses, as it is acknowledged that some module leaders recommend it more proactively than others. When new programmes are validated, they must provide details of how they will develop students' academic skills. Responses usually include embedding skills workshops and promoting Studiosity's writing feedback services. This has proven to be a useful way of embedding Studiosity into academic programmes.

All students in all years can access Studiosity, although they each have a limited number of submissions they can make. Some students use Studiosity a couple of times, others become more dependent. It is noted by the University that Studiosity is not a cheap service, and they do not want students to be dependent on it, but to use it to develop their writing skills. There is however a risk that the University itself becomes dependent on Studiosity, as an effective way

of supporting the study needs of a large number of students. The University feels that it would not be feasible for them to try to replicate the Studiosity offer.

Benefits and impact of Studiosity

While this research has identified that staff initially felt uncomfortable about an external organisation providing writing feedback, this had largely been overcome. Academic staff were reassured by the pilot and subsequently that Studiosity is not interfering with academic content, but rather Studiosity helps students to develop their writing skills, and to demonstrate their academic understanding:

Studiosity helps students' academic understanding to shine through, as it helps them to articulate their understanding better – but Studiosity does not improve students understanding – but it does make marking easier for staff.

Academic skills staff have found that Studiosity has freed up their time to undertake new work (to support transition initially during the pandemic and which continues), to work with more complex student needs, and to embed study skills into courses. Studiosity is referenced in the new TEF submission as this shows commitment to supporting students to succeed, and investment in students' learning. The University is interested in understanding more about how Studiosity benefits its students.

Analysis of data from the MLU comparing the continuation, progression and attainment of students who have used Studiosity online writing feedback compared to those who have not provided some insight into how students have benefited from Studiosity. There are some limitations of this analysis, particularly there is no control group and students voluntarily decide whether or not to access the service, but evidence suggests that Studiosity is increasing the completion and progression, and attainment of users, and this benefit is particularly significant for students from target groups.

Overall outcomes

- **Uptake:** The Studiosity take up rate is 12.3% for level 4 and level 5 students; this varies by student characteristics, including lower usage by ethnic minorities, international and male students. This is shown in chart 28, below.
- **Completion & Progression:** In 2020/21, of the 638 level 4 students who used Studiosity, 617 (97%) completed the year and progressed to the following year. This compares favourably with the progression rate of 72% (3270 out of 4546) for students who were non-users. For level 5 students, the progression rate for Studiosity users was 98% (512 out of 522) and for non-Studiosity users was 79% (2940 out of 3701). This is shown in Chart 29 below.
- **Attainment:** 70% (444 out of 638) of Studiosity users at level 4 achieved high attainment, compared with 47% (1902 out of 4015³) of non-users and the pattern was similar for level 5, with 74% (387 out of 522) of users achieving high attainment, compared with 47% (1613 out of 3417) non-users. Failure rates were low for users at both levels, with 3% (19 out of 638) of users failing at level 4 (compared with 18%

³ The total figure for attainment is lower than for completion and progression, as some attainment data was suppressed where numbers were particularly low, in order to ensure no individual student result was identifiable from the data

non-users) and 1% (7 out of 522) at level 5 (compared with 14% non-users). This is shown in chart 30 below.

Overall, Studiosity users studying at levels 4 and 5 are more likely to complete their course, progress to the next year and achieve higher attainment than non-users.

Chart 28: Level 4 student uptake of Studiosity by characteristics at MLU

Uptake by Category

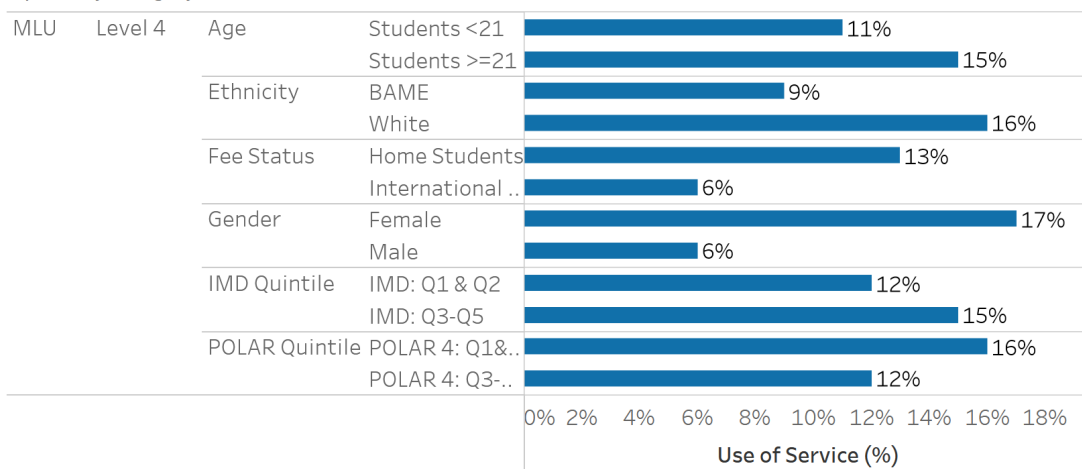


Chart 29: Completion and progression for Studiosity users and non-users, MLU

Overall Completion & Progression

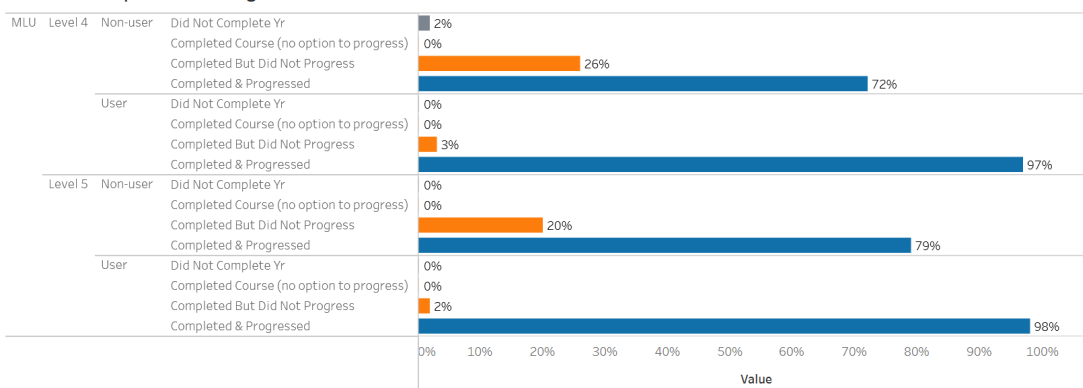
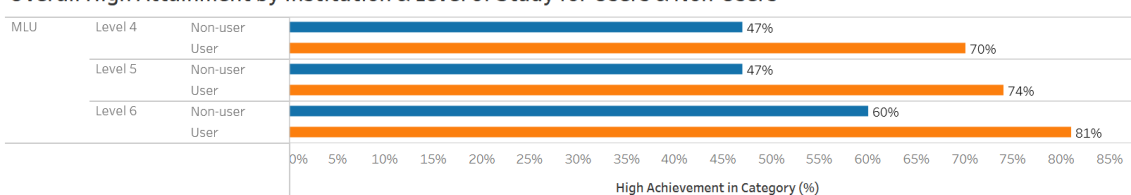


Chart 30: Attainment for Studiosity users and non-users, MLU

Overall High Attainment by Institution & Level of Study for Users & Non-Users

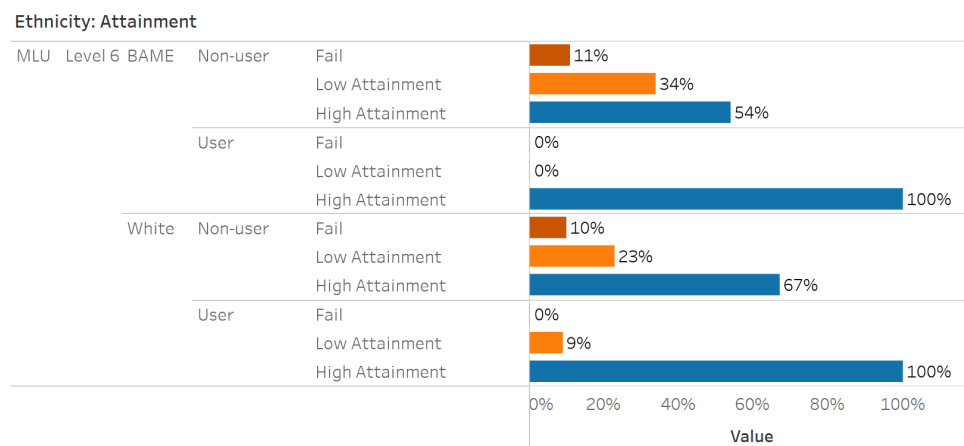


Students from minority ethnic groups Compared with White Students

- **Uptake** of the service amongst minority ethnic students was generally lower than it was amongst White students: 9% of eligible level 4 minority ethnic students used Studiosity, compared with 16% White students; and 8% of level 5 minority ethnic students compared with 18% of White students.
- **Completion and Progression:** The contrast in outcomes for users and non-users amongst Students from minority ethnic groups was more pronounced than for White students: 96% (238 out of 248) of black, Asian and ethnic minority students at level 4 who used the service progressed to the next year, compared with 68% (1630 out of 2394) for non-users; amongst White students, 97% (278 out of 287) of users progressed, compared with 76% (1123 out of 1487) for non-users. For level 5 students, 97% (202 out of 208) of minority ethnic student users progressed, compared with 78% (1747 out of 2242) of non-users; and 100% (298) of White users progressed, compared with 82% (1145 out of 1388) of non-users.
- **Attainment:** More users achieved high attainment and fewer failed than non-users for both Students from minority ethnic groups and White groups at both levels. Of particular note is that only 3% (7 out of 248) of minority ethnic student users at level 4 failed, compared with Studiosity users from IMDQ1&2 had significantly better rates of completion and progression, and attainment than non-users, and this could contribute to closing awarding gaps between students from IMDQ1&2 and IMDQ1&2. 22% (462 out of 2109) on non-users (for white students 3% users failed compared with 13% non-users). At level 5, 0% (0 out of 204) of minority ethnic student users failed, compared with 16% (331 out of 2093) non-users (0% users and 10% non-users for white students).

While students from minority ethnic groups were less likely to use Studiosity than White students, for level 4 and 5 minority ethnic students were significantly more likely to continue and progress than minority ethnic student peers who did not use Studiosity, which is likely to be contributing to closing the awarding gap between Black and White, and Asian and White students. See Chart 31.

Chart 31: Attainment by ethnicity for Studiosity users and non-users, MLU

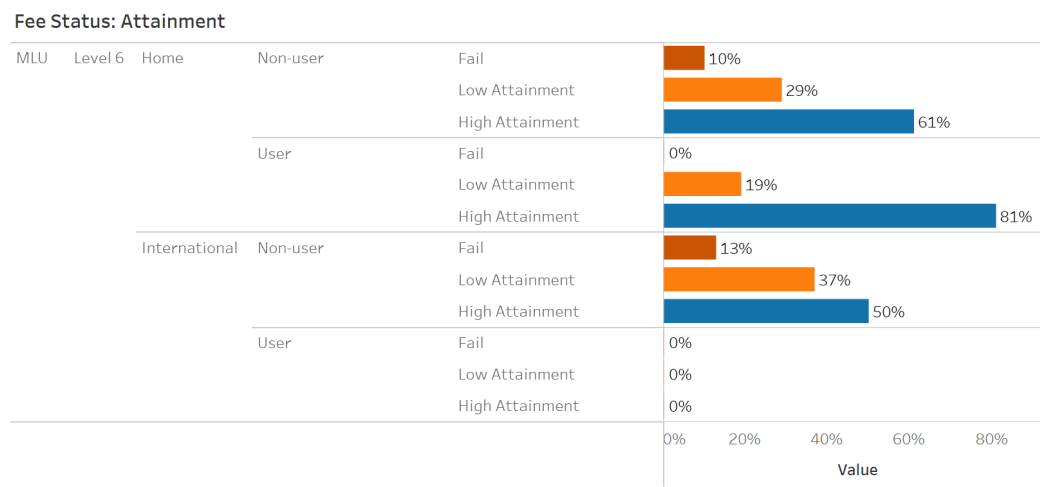


Home Students Compared with International Students:

- **Uptake:** Home students are more likely to use Studiosity than international students. At level 4 13% home students, compared to 6% of international students.
- **Completion and Progression:** Studiosity use was associated with similar patterns of outcomes for both international and home students at Level 4: 100% of international users progressed, compared with 76% of non-users; while 97% of home users progressed, compared with 71% of non-users. For Level 5, the differential amongst international students was more profound, with 100% of users progressing, compared with 72% non-users and 98% of home users progressing compared with 80% for non-users.
- **Attainment:** Users across these categories achieved more high attainment and fewer failed than non-users. The pattern was similar across groups: for example, at level 4, 69% of international students and 70% of home student users achieved high attainment, compared with 52% of international students and 47% of home non-users.

Uptake of Studiosity is lower for international students than home students, but use is associated with similarly higher levels of attainment for both home and international students compared to non-users.

Chart 32: Attainment by fee status for Studiosity users and non-users, MLU



Part-time Compared with Full-time Students:

- **Completion and Progression:** 100% (9 out of 9) of part-time students at Level 4 progressed, compared with 58% of non-users (45 out of 77); while 97% (608 out of 628) of full-time students progressed compared with 72% (3225 out of 4468) of non-users. At Level 5, the pattern for each group was almost identical: 100% of part-time users progressed, compared with 81% of non-users; and 98% of full-time users progressed, compared with 80% non-users.
- **Attainment:** 100% (5 out of 5) of users at level 4 studying part-time achieved high attainment compared with 52% (31 out of 60) of non-users. For full-time students, 70% (439 out of 628) of users achieved high attainment, compared with 47% (1871 out of 3955) non-users. There were no part-time student users reported at level 5; the pattern

for full-time students was similar to level 4 (70% high attainment for users compared with 47% non-users).

Under-21 Students Compared with Over-21 Students:

- **Completion and Progression:** The pattern for progression amongst users and non-users was similar across these groups for both level 4 and level 5 students, with users faring better than non-users in all cases. While there was no major differential amongst the groups in terms of outcomes, it is worth noting that uptake of the service was slightly lower amongst under-21 students (11% for level 4 and 5) than over-21 students (15% at both levels).
- **Attainment:** Users across age categories achieved more high attainment and fewer failed than non-users. The pattern was similar across groups: for example, at level 4, 71% of under-21s and 67% of over-21 users achieved high attainment, compared with 46% of under-21 and 51% of over-21 non-users.

Male compared with female students:

(Please note that no data was provided for any students who do not identify as male or female: this may have been due to suppression of the data due to small sample size.)

- **Uptake:** Male students were significantly less likely to use Studiosity than female students (level 4: 5.8% of males compared to 16.8% of female students).
- **Completion and Progression:** Usage amongst male students was associated with a more profound improvement in progression rates for level 4 students, where 100% (125) of male users progressed, compared with 66% (1317 out of 2007) of non-users: for female students, 96% (492 out of 511) of users progressed, 77% (1953 out of 2539) of non-users. The contrast across groups was less pronounced for level 5, with 100% of male and 98% of female users progressing, compared with 78% male and 82% female of non-users.
- **Attainment:** Once again, users fared better than non-users, with a similar pattern across groups: 75% (93 out of 124) of males and 69% (351 out of 511) of females at level 4 obtained high attainment, compared with 42% (735 out of 1741) male and 51% (1167 out of 2274) female non-users. The pattern was similar at level 5. Of note is that no male users failed at either level, compared with 24% of non-users at level 4 and 16% of non-users at level 5.

Male students who use Studiosity, especially at Level 4 have higher rates of completion and progression than non-users, and higher rates of attainment.

Students from IMD Q1&2 Compared with Students from IMD 3-5:

- **Completion and Progression:** Use of Studiosity was associated with better progression outcomes in all cases, with the pattern similar across groups for students at both level 4 and 5 (e.g. 96% of IMD Q1&2 users at level 4 progressed, compared with 69% non-users; 98% of IMD Q3-5 compared with 75% non-users).

- **Attainment:** Users fared better than non-users, with a similar pattern across groups: 67% of IMD Q1&2 and 73% of IMD Q3-5 obtained high achievement, compared with 42% and 52% non-users respectively. At level 5, IMD Q3-5 users achieved 84% high achievement, compared with 51% non-users: the figure is lower for IMD Q1-2, where 65% of users achieved high attainment (44% for non-users).

Studiosity users from IMDQ1&2 had significantly better rates of completion and progression, and attainment than non-users, and this could contribute to closing awarding gaps between students from IMDQ1&2 and IMDQ1&2.

Students from POLAR4 1&2 Compared with Students from POLAR4 3-5:

- **Completion and Progression:** Use of Studiosity was associated with more positive progression outcomes in all cases, with the pattern similar across groups for students at both level 4 and 5 (e.g. 94% of POLAR Q1&2 users at level 4 progressed, compared with 72% non-users; 97% of POLAR Q3-5 compared with 71% non-users).
- **Attainment:** Users fared better than non-users, with a similar pattern across groups: for example, 67% POLAR4 Q1&2 and 70% of POLAR4 Q3-5 obtained high attainment compared with 50% and 45% non-users at level 4. The pattern was similar for level 5 students.
- Students from POLAR4 1&2 had higher rates of completion and progression and attainment than non-users, and this could contribute to closing continuation and awarding gaps.

Conclusions

MLU provides useful insights into how Studiosity has been introduced (gradually and with an evaluation) to increase engagement and support from staff, and how it is integrated with other institutional academic skill and writing development services. Both academic and professional staff have benefited from its introduction, although the university management is mindful of the cost of the service and their dependency on Studiosity. The impact data is encouraging, showing that Studiosity users consistently have higher rates of continuation, progression and attainment. It should be noted however that while the overall usage rate at levels 4 and 5 is 12.3% this varies significantly between groups. In particular students from minority ethnic groups students, international students and male students all under-use the service, but the gains are potentially significant for these groups and for students from IMDQ1&2. MLU should consider how to increase the take up by students from these groups, and undertake further analysis to examine the impact on continuation and awarding gaps.

Appendix 2: Large multi-disciplinary Northern Regional University (NRU) with a large population of commuter and first in family students

Summary

- NRU recruits students predominantly from the region, with low and medium tariff entry qualifications; a substantial number are commuter students and the number of international students is increasing.
- NRU has a strong commitment to supporting all students, especially those from non-traditional backgrounds to succeed, and Studiosity is available to all students. Studiosity is promoted to students via the VLE, academic advisers, email, lecturers and other routes.
- Studiosity is used by approximately 11% of NRU students. It is particularly well-used by groups targeted in the Access and Participation Plan (mature students, ethnic minorities and students from lower socio-economic groups), although not male students; it is also used by a higher proportion of international students compared to home students.
- NRU uses Studiosity to develop students' skills and confidence, reduce academic misconduct, and improve student experience and success; in terms of outcomes the primary focus is on eliminating the awarding gap, particularly in relation to ethnicity.
- Staff feel that Studiosity reduces the burden on them, and enables them to guide students to support services that will develop confidence and reduce anxiety.
- Internal feedback indicates that students are highly satisfied with Studiosity and find it a useful service.
- Analysis of institutional data finds that the continuation rates (levels 4 and 5) are higher for Studiosity users than non-users. Progression to the next year/level is lower, perhaps suggesting other challenges that impact on students' lives. A completed level will facilitate them returning to higher education without having to repeat the year.
- Level 6, Studiosity users are more than likely than non-users to achieve High Attainment.
- The White/ethnic minorities and the home/international awarding gaps were smaller for Studiosity users than non-users.
- Overall, the University believes Studiosity is good value for money, as it buys student happiness, provides effective student support, and contributes to improved academic outcomes.

Context

This case study focuses on a multi-disciplinary Northern Regional University (NRU) with around 30,000 students; the majority of students are from state schools (almost 100%) and more than half are the first in their family to attend higher education. More than half of the undergraduates are recruited from the region, and 40% commute to study and a similar proportion remain in the region after graduation. The majority of undergraduates (over 80%) are under the age of 21 on entry, the ethnicity of the home student population mirrors the UK as a whole, being predominantly White, and the next largest group is Asian (around 9%); the number of students declaring a disability is around the national average and represents a large number of students. While around 14% of the student population are international students, these are mostly postgraduates. Just under a half of undergraduate entrants have medium tariff entry qualification, and around three quarters of undergraduate entrants have low or medium tariff

entry qualifications. NRU identified that commuter students are more likely to be first generation in HE, work part-time, be from a lower income background and have caring responsibilities, and students who are part-time, mature, from an ethnic minority background and the most disadvantaged, are more likely to be commuters. NRU's Access and Participation Plan (APP) notes that the University has good rates of continuation, especially for Asian students, but singles out students from socio-economically disadvantaged areas, and especially male disadvantaged students and commuter students as priorities. NRU's biggest challenge identified in the APP however, is to address awarding gaps, particularly between Black and White, and Asian and White students.

Rationale for introducing Studiosity

NRU has a strong commitment to student support, and to creating a 'culture of support', informed by the principle that everyone needs support, rather than a deficit view of students. NRU does however describe itself as having a student population with 'widening participation student demographics', and it was the need for these students to access and develop academic skills that informed the University's decision to work in partnership with Studiosity. Today, the need for the development of skills extends to the growing number of international students too. The Deputy VC also draws attention to the role that Studiosity plays in developing academic integrity; the writing feedback service develops students' understanding about how to cite and reference, and develops their confidence in their own ability to undertake academic writing without needing to either unintentionally or deliberately resort to plagiarism or other forms of academic misconduct.

Positioning, availability and promotion of Studiosity

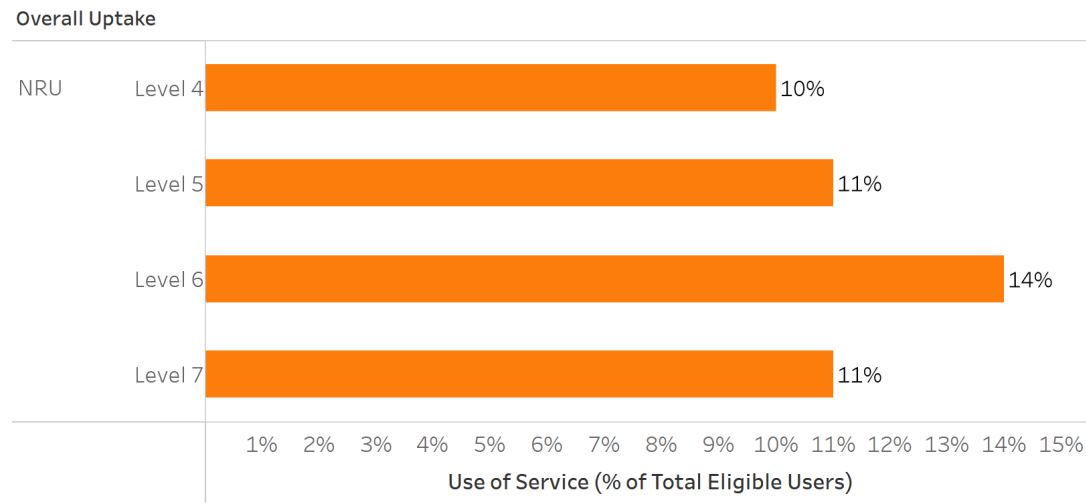
NRU offers a tripartite approach to supporting students, combining discipline-specific academic advisers, with central academic and pastoral support, and advice and work experience to improve students' employability and outcomes. Support is provided for students 'because we all need it' rather than being positioned as something being needed and accessed by exception, or due to some personal weakness or deficit. According to staff, students are encouraged to use Studiosity because it will benefit them, but on reflection, staff feel that: "we could do more to demonstrate the benefits to students". For example, they could engage peers in more horizontal information sharing about the value of Studiosity, and involve the course team more in promoting its use, including perhaps embedding Studiosity into the assessment process, which might contribute to higher uptake in the first year of study (level 4).

The University's offer is designed to be an integrated and comprehensive approach to student support. Studiosity is integrated within academic skills and other academic feedback services offered by NRU: it is advertised on their webpage about essential higher education skills, it is promoted and accessed via the virtual learning environment, and use of Studiosity is encouraged by academic advisers. The way Studiosity is integrated does mean that some students will not appreciate that it is an externally provided service. It was also noted that there is not lack of Studiosity communication – but there is a challenge about the most effective way of reaching students, e.g. via the VLE or email, this was especially challenging during covid when they didn't have the big lecture to communicate through.

Student uptake and usage of Studiosity

As noted above, Studiosity is embedded into the student offer at NRU, and available to all students. The uptake data (chart 33) shows that the service is used by 10% of level 4 students, 11% of level 5, 14% of level 6 and 11% of level 7 (PGT) students.

Chart 33: Uptake of Studiosity, by levels, at NRU

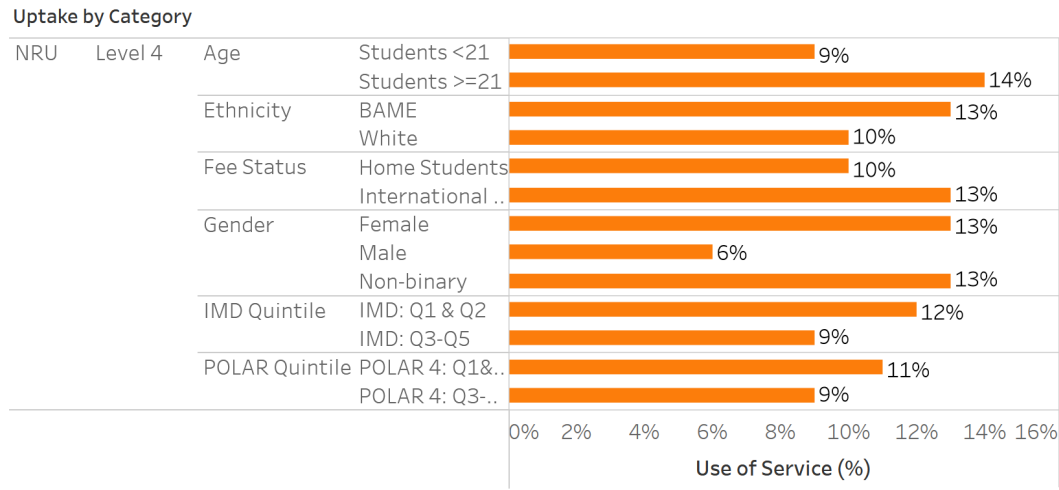


The fact that Studiosity is used least by the level 4 students, and usage increases year on year may reflect the focus at NRU of using Studiosity to address the awarding gap, and also the increased need for greater independent learning as one progresses through the university levels. It may also reflect the ways in which the service is positioned and promoted by the university, which does not emphasise using Studiosity as a first step, but as a source of feedback on writing. Staff suggested as well that the service is valued more in disciplines that include more emphasis on writing, and that students in subjects such as computing and engineering may not use the service as much.

Staff felt that course teams could encourage the use of Studiosity at key points more to encourage and support Staff felt that course teams could encourage the use of Studiosity at key points – i.e. scaffold the use of Studiosity in relation to assessments, and use the assignment calculator to assist.

Chart 34 shows a breakdown of how level 4 usage varies by student characteristics. It can be seen that mature students, students from ethnic minorities, international students, female and non-binary students, and students from lower socio-economic groups (IMD quintiles 1 and 2 and POLAR 4 quintiles 1 and 2). This demonstrates that at NRU Studiosity is being used to a greater extent by students from groups that are targeted within Access and Participation Plans, with the exception of males.

Chart 34: Level 4 uptake of Studiosity, by student characteristics, at NRU



Benefits and impact of Studiosity

NRU is very committed to evidence and evaluation, and they have a strong evidence base about the impact of Studiosity on their students. Furthermore, the focus groups organised as part of this study involved a lot of staff from NRU, in a variety of roles. This section draws on NRU evidence and the focus group discussions.

Staff

Academic staff are all short of time, and this is particularly true in relation to their role as academic advisers. Some staff who are academic advisers felt that Studiosity helps them to manage students' expectations, for example that they are not able to check drafts of their work. Instead, being able to refer students to Studiosity saves academic advisers time, reduces workload, and prevents them from feeling obliged to undertake this additional task.

Staff with a wellbeing remit felt that it was useful to be able to signpost students to Studiosity, especially for students who feel anxious. It is particularly useful that it is a 24/7 service, which means that whatever day of the week or time of day, these students can quickly get an answer or feedback on their work, which relieves their anxiety.

Students

The Deputy Vice Chancellor said:

'Our goal is for students to have a positive experience, to be confident and to belong. Studiosity is developing academic skills and confidence.' (Deputy VC).

According to internal data, in 2021/22 10,000 writing development sessions were used by 4000 unique student users from NRU, with the average number of submissions being 2.6 per student. Internal feedback from students is very positive: 100% of students would recommend Studiosity to others, and post-pandemic there was a 66% increase on the use of Studiosity. Studiosity is thought to be particularly useful to international students, and disabled students. The internal data dashboards show a correlation between using Studiosity and higher attainment.

Staff identified a range of benefits for students:

- Develops writing and referencing skills.
- Provides anxious students with almost instant reassurance.
- Offers a personalised service.
- Is convenient and attractive being online, which international students in particular like.
- Appears to be a good student experience, which motivates students to use the service again in the future.

Staff did note however that there is a risk that those students who are better connected at the university and are already motivated and engaged make more use of Studiosity.

The majority of students at NRU are first generation entrants, and the staff and university managers believe that Studiosity contributes to student experience, student confidence and student belonging. In particular, they draw attention to the importance of confidence, which enhances students' positive identity with and belonging to the University. The overall aim of Studiosity for the NRU is to protect students from the risk of leaving early, and enhancing their attainment. These factors are explored through the institutional data in the next section.

Institution

NRU senior managers and staff feel that Studiosity is working for the institution by developing students' academic skills and confidence, and contributing to the student experience; their overarching goal is for students to have a positive experience, to be confident and to belong. Furthermore, the Deputy Vice Chancellor notes that Studiosity makes financial sense as it contributes to the continuation and completion of students, and that it is cheaper to retain students than to recruit them. NRU continues to partner with Studiosity because they believe it represents good value for money. This is demonstrated internally by the use students make of the service, the positive feedback they receive from students, and analysis of their institutional data. The DVC said: 'Students like Studiosity, so it buys happiness'.

Institutional data

We have undertaken analysis of NRU institutional data, comparing the continuation, progression and attainment of students who have used Studiosity online writing feedback compared to those who have not. While we acknowledge the limitations of this analysis (as there is no control group and students voluntarily decide whether to access the service), the evidence is worthy of note.

Summary of impact on student outcomes

- Between 10% and 14% of eligible students use Studiosity in each level. The highest rate of use is by level 6 students. Students of colour had a higher rate of uptake than White students. Male students have significantly lower rates of usage than female and non-binary students.
- Continuation rates (levels 4 and 5) are higher for Studiosity users than non-users, but progression to the next year/level is lower, perhaps suggesting other challenges impact on students' lives. A completed level will facilitate them returning to higher education without having to repeat the year.
- Level 6, Studiosity users are more than likely than non-users to achieve High Attainment.

- The White/ethnic minorities and home/international awarding gap was smaller for Studiosity users than non-users.

Overall outcomes

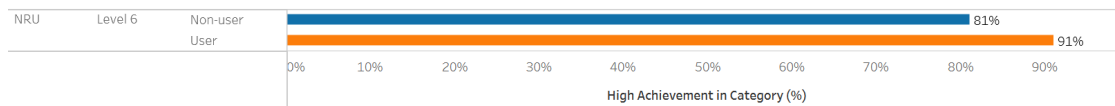
- **Use of Service:** 10% (695 out of 6804) of eligible users opted to use the service at Level 4; and this figure rose to 11% (767 out of 6672) at Level 5 and 14% (938 out of 6521) at Level 6, before dropping back to 11% (536 out of 4998) at Level 7.
- **Completion & Progression (Level 4 and 5):** Overall, Studiosity users were less likely to fail to complete the year than non-users, but less likely to progress to the next level.
 - In Year 4, 3% (19 out of 695) of users did not complete the level compared with 8% (512 out of 6109) of non-users.
 - In Year 5, <1% (3 out of 767) users did not complete the level compared with 5% (296 out of 5905) of non-users.
 - Of the students who completed the year but did not progress to the following year, 13% of these were users and 4% non-users at both Level 4 and 5.
 - In total, 84% (585 out of 695) Level 4 users completed the year and progressed to the following year compared with the progression rate of 86% (5279 out of 6109) of non-users.
 - For level 5 students, the progression rate for users was also 84% (641 out of 767) and for non-users was 87% (5120 out of 5905).
 - This general trend is also the case for Level 6 and 7 students, although the data provided for these years includes a significant proportion of students whose course finished that year, so could not be considered as part of the impact on progression. As such, we have focussed the analysis on Year 4 and 5 when there were very low numbers of students who fall into this category.

This data and analysis indicate that Studiosity users studying at levels 4 and 5 were more likely to complete the year/level, but less likely to return to study next year (or at the next level). This suggests that these students may have been enabled to complete the level with support from Studiosity, despite other challenges being experienced, but have opted to take a leave of absence or similar. This is a preferable course of action to leaving mid-way through the year/level, which would mean that if they returned they would probably have to repeat the full year – which would certainly have financial implications, and could impact negatively on other issues such as confidence or willingness to return.

- **Attainment (Level 6):** Attainment data was provided for undergraduate first-degree students studying at Levels 6 and 7, with students grouped into three categories, either 'High Attainment: Good Hons: 1st/2:1', 'Low Attainment: 2:2/3rd/Pass' or 'Fail'. However, at Level 7 the sample size was small and only 6 out of 92 students used Studiosity.
 - Focussing on Level 6 which had a larger sample size (N=5555), 91% (728 out of 804) Studiosity users achieved High Attainment, compared with 81% of Non-users (3833 out of 4751). The remaining students fell into the category of 'Low Attainment', with none of the students failing the course. Overall, at Level 6, Studiosity users are more than likely than non-users to achieve High Attainment (see chart 35 below).

Chart 35: High attainment for level 6 Studiosity users and non-users, NRU

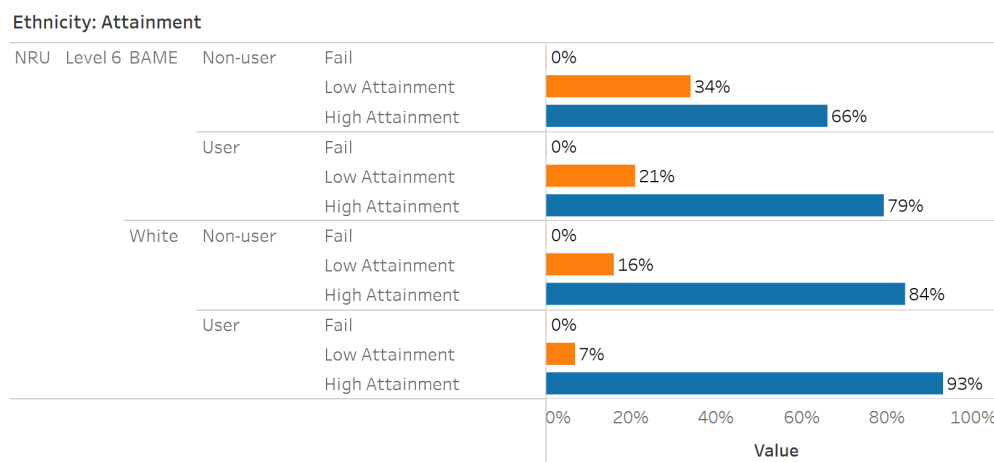
Overall High Attainment by Institution & Level of Study for Users & Non-Users



Students from ethnic minority groups compared with White students:

- **Use of Service:** Uptake of the service amongst students of colour was slightly higher than it was amongst White students: 13% of eligible level 4 ethnic minority students used Studiosity, compared with 10% White students; and 14% of level 5 ethnic minority students compared with 11% of White students.
- **Completion & Progression (Level 4 and 5):** There was a differential between black, Asian and minority ethnic users who progressed (75% in Year 4, 76% in Year 5) and their white counterparts (88% in Years 4 and 87% in Year 5), with the gap slightly less pronounced for non-users (84% ethnic minorities, 88% white in Year 4, 85% ethnic minorities, 88% white in Year 5). Non-continuation rates were lower for users than non-users across groups, the pattern being similar across these groups.
- **Attainment (Level 6):** Fewer black, Asian and minority ethnic students achieved 'High Achievement' than White students, although Studiosity users fared better than non-users in both categories: 79% of ethnic minority users were High Achievement compared with 66% non-users; 93% of White users were High Achievement compared with 84% non-users. In terms of awarding gaps, the awarding gap between White and ethnic minorities non-users is 16 percentage points, while for Studiosity users the awarding gap is 14 percentage points. The evidence suggests that NRU is engaging more students from targeted groups to use Studiosity, and this is making a contribution to closing the awarding gap. (See chart 36 below)

Chart 36: Level 6 attainment for ethnic minorities and White students, comparing Studiosity users and non-users

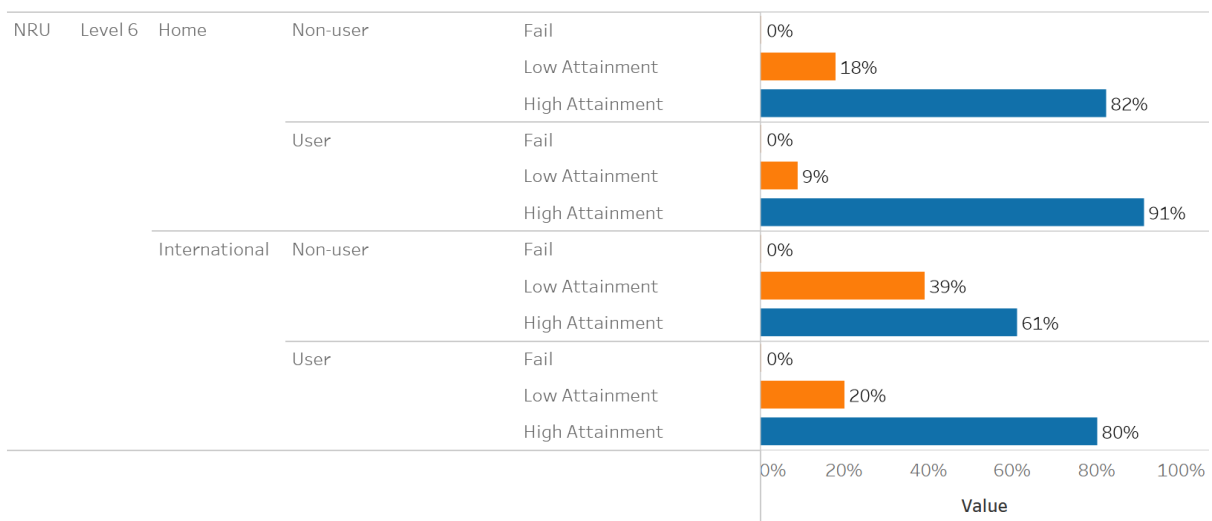


Home Students Compared with International Students

- **Use of Service:** Use of the service was very similar across groups and in line with total usage for each Year.
- **Completion & Progression (Level 4 and 5):** Fewer international students progressed than home students whether users or non-users. At Level 4, 60% of international Studiosity users progressed, compared with 86% of home Studiosity users, and 70% of international non-users progressed compared with 87% home non-users. This pattern was very similar for Year 5.
- **Attainment (Level 6):** Fewer international students achieved 'High Achievement' than home students, although users fared better than non-users in both categories: 80% of international users were High Achievement compared with 61% non-users; 91% of home users were High Achievement compared with 82% non-users. Thus the awarding gap for Studiosity users is 11 percentage points, compared with 21 percentage points for non-users. This is shown in chart 37 below.

Chart 37: Differential level attainment between home and international students, comparing Studiosity users and non-users

Fee Status: Attainment



Part-time Compared with Full-time Students

- **Use of Service:** Full-time students were more likely to use the service than part-time students: while there was very little take-up by any students at Level 3 (0% part-time and 2% full-time), take-up by part-times ranged from 6% at Level 4, 9% at Level 5 and 8% at Levels 6 and 7. While full-time student take-up was 10% at Level 4, 12% at Level 5, 15% at Level 6 and 13% at Level 7.
- **Completion & Progression (Level 4 and 5):** Fewer part-time students than full-time students progressed, whether users or non-users: 57% of part-time users at Level 4 progressed, compared with 65% non-users; and 85% of full-time students progressed compared with 88% non-users. The pattern was similar for Level 5 students.
- **Attainment (Level 6):** The pattern of attainment was in line with the overall pattern, with little differentiation between these groups.

Under-21 Students Compared with Over-21 Students

- **Use of Service:** Mature students (over-21s) were more likely to use the services for all years except for Level 6, when more under-21s took up the service.
- **Completion & Progression (Level 4 and 5):** The pattern for progression amongst users and non-users was similar across these groups for both level 4 and level 5 students, with non-users slightly more likely to progress, while being slightly more likely not to complete the year at all. While there was no major differential amongst the groups in terms of outcomes, it is worth noting that uptake of the service was slightly lower amongst under-21 students (9% for Level 4, 10% for Level 5) than over-21 students (14% Level 4, 15% Level 5).
- **Attainment (Level 6):** More under-21 students achieved 'High Achievement' than over-21 students, with users faring better than non-users in both categories: 92% of under-21 users were High Achievement compared with 82% non-users; 85% over-21s were High Achievement compared with 77% non-users.

Male/Female/Non-binary Students

- **Use of Service:** There was less uptake of the service amongst male students (6% in Year 4 and 5, 10% in Year 6 and 8% in Year 7) compared with female (13%, 16%, 18% and 12%) and, for all years except Year 6 when the one eligible student did not take up the service, non-binary (13%, 18%, 0%, 33%) groups.
- **Completion & Progression (Level 4 and 5):** The most marked contrast was between male users and non-users: 74% of male users at Level 4 progressed, compared with 84% of non-users; and 76% of Level 4 users compared with 85% non-users. At the same time, fewer male users failed than non-users- 2% compared with 9% at Level 4, 0% compared with 5% at Level 5.
- **Attainment (Level 6):** The pattern of attainment was in line with the overall pattern, with little differentiation between these groups.

NB only two students reported on fell into the category of 'Students who don't identify as either male or female': both were non-users and achieved High Attainment.

Students from IMD Q1&2 Compared with Students from IMD 3-5:

- **Use of Service:** Use of the service was broadly similar across groups, with slightly higher usage for IMD Q1&2 students than IMD Q3-Q5 users for each year except Year 6 when the opposite was true.
- **Completion & Progression (Level 4 and 5):** As per the overall pattern, use of Studiosity was associated with fewer users failing than non-users: 3% of Level 4 IMD Q1&2 users failed compared with 10% of non-users; and 3% of IMD Q3-Q5 non-users failed compared with 7% non-users. At level 5, 0% of users failed in either category, compared with 7% of IMD Q1&2 and 4% of IMD Q3-Q5 non-users. At the same time, more non-users who completed progressed to the next users: this pattern was the same for IMD Q1&Q2 and IMD Q3-Q5 groups.

- **Attainment (Level 6):** More IMD Q3–Q5 students achieved ‘High Achievement’ than IMD Q1–Q2, with users faring better than non-users in both categories: 95% of IMD Q3–Q5 users were High Achievement compared with 85% non-users; 83% of IMD Q1–Q2 were High Achievement compared with 76% non-users.

Students from POLAR4 1&2 Compared with Students from POLAR4 3–5

- **Use of Service:** Use of the service was broadly similar across groups, with slightly higher usage for POLAR4 Q1&2 students than POLAR4 Q3–Q5 users for each year except Year 6 when the opposite was true.
- **Completion & Progression (Level 4 and 5):** The pattern similar across groups for students at both level 4 and 5 followed the overall pattern: fewer users failed than non-users (e.g. 1% of POLAR Q1&2 users at level 4 and 5 failed, compared with 6% non-users; 0% of POLAR Q3–5 compared with 4% non-users); and more non-users who completed progressed compared to users (e.g. 11% of POLAR Q1&2 users completed but did not progress compared with 3% non-users at Level 4; this pattern was similar across groups).
- **Attainment (Level 6):** More POLAR 4 Q3–Q5 students achieved ‘High Achievement’ than POLAR 4 Q1–Q2, with users faring better than non-users in both categories: 94% of POLAR 4 Q3–Q5 users were High Achievement compared with 85% non-users; 86% of POLAR 4 Q1–Q2 were High Achievement compared with 77% non-users.

Conclusions

NRU is clear from its own internal data and evaluation that Studiosity is valued by students, contributes to the institution’s mission and represents good value for money. Students report high rates of satisfaction with the service, and the evidence shows that Studiosity users have higher rates of completion of the year (although lower rates of progression to the next level of study), and higher attainment rates. The data indicates that with respect to ethnic minority students, and international students. Studiosity may be contributing to closing awarding gaps, and warrants further investigation, for example, using an experimental design. Staff value Studiosity as relieves them of additional burdens, such as routine checking of students’ work, and provides a readily available service that provides reassurance to anxious students.

References

- Anderson, A. (2005). *The Community Builder's Approach to Theory of Change. A practical guide to theory development*. The Aspen Institute Roundtable on Community Change. Available at https://www.theoryofchange.org/pdf/TOC_fac_guide.pdf [accessed 12/4/23].
- Benzie, H. J., & Harper, R. (2020). Developing student writing in higher education: Digital third-party products in distributed learning environments. *Teaching in Higher Education*, 25(5), 633–647.
- Blakey, K. (2019). The Benefits of Increased Student Support Through Access to Studiosity. *嶺東學報*, (45), 1–9.
- Brodie, M., Tisdell, C., & Sachs, J. (2021). Online Writing Feedback: A Service and Learning Experience. *Student Support Services*, 1–18.
- Chalmers, D. and Gardiner, D. (2015). An evaluation framework for identifying the effectiveness and impact of academic teacher development programmes, *Studies in Educational Evaluation*, 46, pp. 81–91. DOI: [10.1016/j.stueduc.2015.02.002](https://doi.org/10.1016/j.stueduc.2015.02.002)
- Crawford, C., Dytham, S. Naylor, R. (2017) *The Evaluation of the Impact of Outreach Proposed Standards of Evaluation Practice and Associated Guidance*, Office for Fair Access
- Devlin, M. (2008). Research challenges inherent in determining improvement in university teaching, *Issues in Educational Research*, 18(1), pp 12–25. [Online] Available at: <http://www.iier.org.au/iier18/devlin.pdf> [Accessed 26 September 2022].
- Devlin, M. (2008). Research challenges inherent in determining improvement in university teaching, *Issues in Educational Research*, 18(1), pp 12–25. [Online] Available at: <http://www.iier.org.au/iier18/devlin.pdf> [Accessed 26 September 2022].
- Dollinger, M, et al. 2020. Investigating the Usage and Perceptions of Third-Party Online Learning Support Services for Diverse Students. *Journal of Interactive Media in Education*, 2020(1): 14, pp. 1–9. DOI: <https://doi.org/10.5334/jime.555>
- Dyson, A. and Todd, L. (2010). Dealing with complexity: theory of change evaluation and the full service extended schools initiative, *International Journal of Research and Method in Education*, 33(2), pp. 119–134. DOI: [10.1080/1743727X.2010.484606](https://doi.org/10.1080/1743727X.2010.484606)
- Harrison, N., Vigurs, K., Crockford, J., McCaig, C., Squire, R. and Clark, L. (2018). *Understanding the evaluation of access and participation outreach interventions for under 16 year olds*. Bristol: Office for Students. [Online] Available at: https://www.officeforstudents.org.uk/media/a8ad5c94-7a33-4b53-8f09-824d0705f073/of_s2018_apevaluation.pdf [Accessed 8 August 2022].
- HM Treasury (2020). *The Magenta Book. HM Treasury guidance on what to consider when designing an evaluation*. Available at <https://www.gov.uk/government/publications/the-magenta-book> [accessed 4 March 2023].

Lynch, A. (2017, April). “*The James Cook University Learning Centre Approach to Enhancing Student Success and the Role of YourTutor Service.*” Paper presented at Universities UK Conference for Excellence in Teaching and Learning, London.

Nous Group (2022). *Studiosity student retention ROI meta analysis.*

Office for Students (OfS) (2019). *Regulatory advice 6: How to prepare your Access and Participation Plan*, available <https://www.officeforstudents.org.uk/publications/regulatory-advice-6-how-to-prepare-your-access-and-participation-plan-effective-practice-advice/> [accessed 3 March 2023]

Office for Students (OfS) (2022). *The Office for Students Annual Review*, available <https://www.officeforstudents.org.uk/publications/annual-review-2022/a-statistical-overview-of-higher-education-in-england/> [accessed 14 March 2023]

Pike, D. (2022) *Students’ perspectives of a study support (Studiosity) service at a UK HEI.* University of Bedfordshire research report

Pike, D., & Aruna, I. (2022). Implementing a study support service (Studiosity) software system to improve students’ academic writing skills – what are the initial lessons we have learned, and where will we go next?. In *INTED2022 Proceedings* (pp. 6337–6345). IATED.

Red Brick Research Agency (2021). *2021 UK Student Wellbeing Survey.* Studiosity

Rees, J. (2022) *How Studiosity Was Embedded Into A Core Psychology Module.* University of Sunderland Teaching and Learning Effective Practice Hub <https://practicehub.info/how-studiosity-was-embedded-into-a-core-psychology-module/> [accessed 11/3/23].

Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between management's perception of total quality service and customer perceptions of service quality. *Total Quality Management*, 13(1), 69–88.

Thomas, L. (2019). *The Impact of Studiosity on the Student Experience.* Liz Thomas Associates Ltd/Studiosity.

Thomas, L. (2020a). Using logic chain and theory of change tools to evaluate widening participation: Learning from the What works? Student retention and success programme, *Widening Participation and Lifelong Learning*, 22(2), pp. 67–82. DOI: [10.5456/WPLL.22.2.67](https://doi.org/10.5456/WPLL.22.2.67).

Thomas, L. (2020b). *Studiosity: Student participation and the impact on persistence in the UK.* Liz Thomas Associates Ltd /Studiosity.

Thomas, L. (2023a). *Summary report: A review of the experience and impact of Studiosity in UK universities, 2017–2022.* Liz Thomas Associates Ltd/Studiosity.

Thomas, L. (2023b). *Evaluation toolkit. Evaluation framework and template to review the implementation and impact of Studiosity.* Liz Thomas Associates Ltd/Studiosity.

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To find out more information about the Studiosity Evaluation framework and guidelines toolkit, email research@studiosity.com, FAO Isabelle Bristow, Managing Director UK and Europe.

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