

UK Studiosity users: Participation and Persistence

Professor Liz Thomas

Liz Thomas Associates Ltd 2020



UK Studiosity users: Participation and Persistence

Research design and report: Liz Thomas, independent consultant

Statistical analysis: Maxine Brodie, independent consultant

Research, analysis and report commissioned by Studiosity

25 June 2020

Executive Summary

Studiosity offers students online academic development and support, 24/7, 365 days of the year. Liz Thomas Associates Ltd undertook an evaluation of the experiences and outcomes of students in UK institutions participating in a pilot of Studiosity in 2018-19. This report focuses on the participation and outcomes of first year (level 4) undergraduate students, drawing on institutional data from six universities.

Participation rates: Who is using Studiosity in the pilot institutions?

- In each university between 4% and 25% of the eligible level 4 students used Studiosity in 2018-19, which is a marked difference in usage rates. Students with low entry tariffs may make less use of this service than expected, but this may be an outcome of how the service is promoted, rather than entry tariffs.
- In all of the universities, male students used the service less than expected (i.e. compared to their proportion of the population in each institution) and were significantly ($p < 0.05$) more likely to be non-users than users.
- In five out of six of the institutions, mature students (over the age of 21 on entry) used the service more than younger students, and in four out of six institutions users were significantly ($p < 0.05$) more likely to be mature.
- With regards to other equity and non-traditional groups (students from disadvantaged areas, black and minority ethnic students, students with disabilities and part-time learners) the participation picture is more mixed.

Student outcomes

- The continuation rate is the proportion of level 4 students who completed the year. In every university the student continuation rate was higher amongst Studiosity users than the non-users, and this difference is significant in three institutions.
- The progression rate is the proportion of level 4 students who progressed to level 5 in 2019-20. 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.

Conclusions and recommendations

- Studiosity warrants serious consideration by higher education institutions wishing to improve level 4 continuation and progression. Implementation should be

accompanied by effective promotion to students who potentially could benefit the most, and further data analysis and qualitative research to better understand participation and outcome rates by different groups.

Introduction

Studiosity is an Australian-based EdTech company that provides online study support 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 specialists and core skills tutors who provide feedback on their writing assignments and help them to work through problems in a live chat session. These services are available to students 24/7, 365 days of the year.

In 2018-19 a number of UK higher education institutions participated in a pilot with Studiosity. Liz Thomas Associates Ltd undertook an evaluation, which aimed to address a number of key questions relating to participation, student experience and student outcomes. This report examines the participation and outcomes of first year undergraduate (level 4) students, it considers the usage rates by different groups of students, and continuation and progression rates.

Institutional data was collected from six universities about the level 4 students who used Studiosity in 2018-19, and their continuation and progression outcomes. This data can be used to answer questions about participation and persistence, more specifically:

1. Participation: Who is using Studiosity? How do these students compare to the target population?
2. Persistence: What is the continuation rate of students who use Studiosity compared to students who did not use Studiosity? What is the progression rate of students who use Studiosity compared to students who did not use Studiosity?

Participation rates: Who is using Studiosity in the pilot institutions?

In each university between 4% and 25% of the eligible level 4 students used Studiosity in 2018-19, and the number of level 4 users in each institution varied between 48 and 965 students (Table 1).

Table 1: Number of level 4 students using Studiosity and percentage of eligible users

University	A	B	C	D	E	F
Number of users	875	965	48	277	54	867
% of eligible students who used the service	9%	12%	8%	25%	4%	7%

This represents a marked difference in uptake between the institutions – and compared to Studiosity’s expectations. This could be due to how the service is promoted, or to other factors (e.g. nature of the student cohort, disciplines, institutional support and time when the pilot was operational). Studiosity provides academic development, so it would be reasonable to assume that students with lower entry qualifications (measured by entry tariff points) would more likely to use the service. Entry tariff data was requested, and received from three of the six institutions (A, B and C); unfortunately not by the two institutions with the starkest difference in usage rates (D and E). Analysis of the entry tariff data from institutions A, B and C (Table 2) demonstrates that in two out of three institutions (A and C) high-tariff students (>390) are significantly more likely to be users of Studiosity ($p=0.0003$; $p<0.0001$) and in two of three institutions (A and B) low-tariff students (<280) are significantly more likely to be non-users of Studiosity ($p=0.0076$; $p<0.0001$).

Table 2: Percentage of high and low entry tariff level 4 students using and not using Studiosity*

University	A	B	C	D	E	F
% of users high tariff	12%	4%	88%	N/A	N/A	N/A
% of non-users high tariff	8%	3%	0%	N/A	N/A	N/A
% of users low tariff	27%	27%	83%	N/A	N/A	N/A
% of non-users low tariff	32%	38%	78%	N/A	N/A	N/A

* ■ = significant difference

Table 2 suggests, perhaps counter-intuitively, that students entering with higher entry tariffs are more likely to make use of Studiosity than students with lower entry tariffs. This does support previous work about lower rates of take up of academic (and pastoral) support by students who stand to benefit the most (Woodfield and Thomas 2013) and the benefits of embedding academic support into the core curriculum (Thomas 2012, Warren 2003). These findings however do not seem to support the patterns of usage observed in institutions D and E. To investigate this further, data provided to institutions by the Office for Students in 2017 as part of the Teaching Excellence and Student Outcomes Framework was used. This indicates that institution E is a high tariff institution (65% of full-time undergraduates held high entry tariffs as reported in the 2017 data), and institution D is medium, low and non-tariff institution (e.g. 38% of full-time undergraduates had low entry tariffs in the 2017 data). The analysis of usage by high and low tariff student in institutions A, B and C would suggest institution D would have lower rates of usage than institution E, but this is not the case. This therefore indicates that the way in which the service is promoted and delivered within the institution makes a difference to usage rates, and it is not just a function of entry tariffs (or other characteristics, as discussed next).

Further analysis of the participation data provides insights into the characteristics of students who are using and not using Studiosity; this is summarised in Table 3.

Table 3: Usage by different student groups*

University	A ¹	B	C	D	E	F
Male population	43%	47%	40%	47%	60%	39%
Male users	26%	28%	25%	34%	31%	21%
Male non-users	45%	50%	42%	52%	61%	40%
Mature population	16%	25%	21%	34%	5%	43%
Mature users	26%	35%	29%	35%	13%	64%
Mature non-users	15%	24%	20%	34%	4%	41%
White population	66%	77%	43%	N/A	64%	61%
White users	67%	74%	33%	95%	67%	95%
White non-users	66%	78%	44%	N/A	64%	58%
No disability population	90%	79%	89%	79%	90%	
No disability users	90%	76%	96%	71%	91%	N/A
No disability non-users	90%	79%	89%	82%	90%	N/A

¹ Data for this institution refers to full time students only.

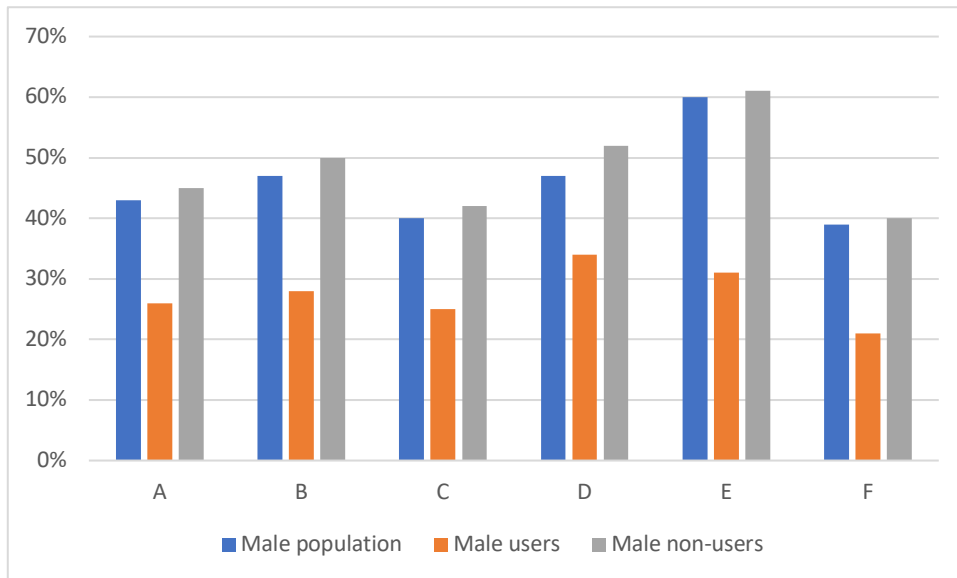
Population	26%	44%	15%	38%	7%	16% ²
POLAR 4						
Q1&2						
Users	21%	50%	13%	48%	4%	16% ²
POLAR 4						
Q1&2						
Non-users	26%	43%	15%	35%	8%	15% ²
POLAR 4						
Q1&2						
Population	44%	21%	38%	11%	6%	N/A
IMD						
Q1&Q2						
Users IMD	45%	27%	31%	11%	2%	N/A
Q1&2						
Non-users	44%	21%	39%	11%	6%	N/A
IMD Q1&2						
Full-time population	82%	91%	96%	N/A	100%	64%
Full-time users	78%	94%	100%	97%	100%	12%
Full-time non-users	83%	91%	96%	N/A	100%	68%

* ■ = significant difference

In all of the universities, male students used the service less than expected (i.e. compared to their proportion of the population in each institution) and were significantly ($p < 0.05$) more likely to be non-users than users (see Chart 1).

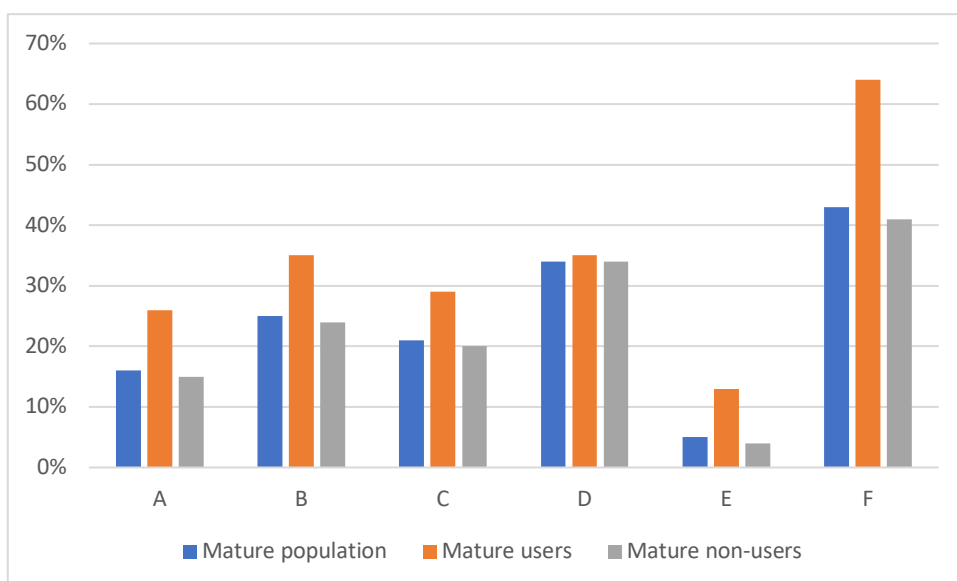
² This is deprivation data used in a UK country other than England.

Chart 1: Comparison of male student population of eligible users, male users and male non-users (%)



In five out of six of the institutions mature students (over the age of 21 on entry) used the service more than younger students, and in four out of six institutions (A, B, E and F) users were significantly ($p < 0.05$) more likely to be mature (see Chart 2).

Chart 2: Comparison of mature student population of eligible users, mature users and mature non-users (%)



Male students have higher rates of withdrawal than female students (HEFCE 2013) and mature student have higher rates of withdrawal than younger students (HEFCE 2013, UUK 2019). Therefore the 'overuse' by mature students is positive, but the under-use by men is cause for concern. For the other equity groups the picture is more mixed and varies between institutions (see Table 3). For example, at the majority of institutions, white students' use and non-use of Studiosity is representative, but significantly more white students used the service at institution F ($p < 0.0001$), and there is significant ($p = 0.0052$) non-use by white students at institution B. There is evidence that students from disadvantaged backgrounds make significantly more use of Studiosity in two institutions B and D, and in institution B this is both in relation to students from both POLAR 4 quintiles 1 and 2, and Index of Multiple Deprivation quintiles 1 and 2 ($p < 0.0001$). In institution A however there is significant under-use by students from POLAR 4 quintiles 1 and 2 ($p = 0.0044$). With regards to disability there is evidence that students with no disability are significantly more likely to be non-users in two institutions, B and D ($p = 0.0327$; $p = 0.0001$).

Full-time students are significantly more likely to be non-users in institutions A and F ($p = 0.0002$; $p < 0.0001$), suggesting greater take up by part-time students. Conversely however in institution B full-time students are significantly more likely to be users ($p = 0.0018$). In terms of mode of delivery, this data relates to 2018-19 when online and distance learning was not the norm in the majority of UK higher education institutions. However, since Covid-19, all higher education institutions have moved provision online, and blended learning will become the norm for the majority of students, and some will continue to have to learn only online as they continue to shield. Thus, it would be instructive to understand more about the impact of mode of study and use of Studiosity, as students move from exclusively or predominantly face-to-face learning to more engagement via online learning.

Student outcomes

Data was collected about student continuation and student progression. The continuation rate is the proportion of level 4 students who completed the year. The progression rate is the proportion of level 4 students who progressed to level 5 in 2019-20. The data is shown in Table 4.

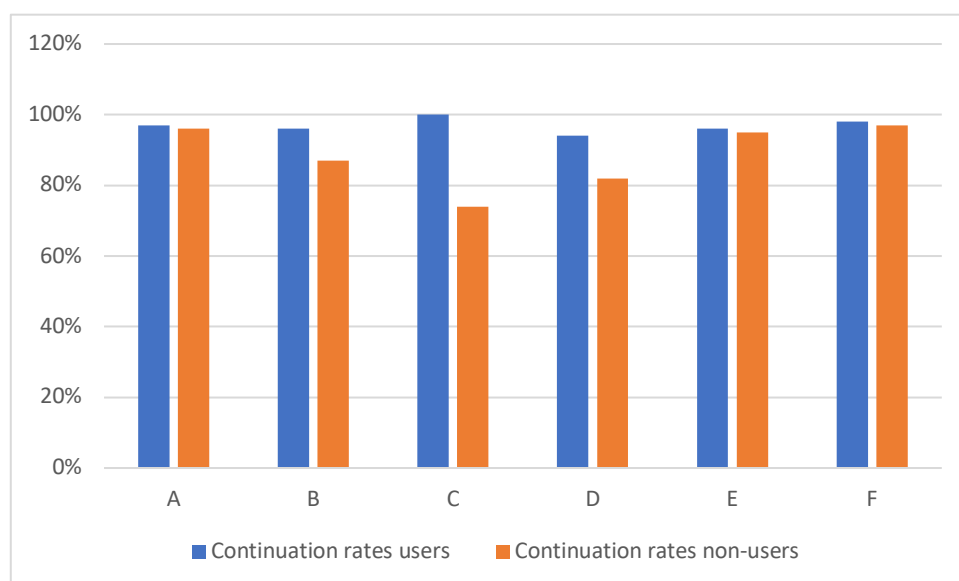
Table 4: Continuation and progression rates for Studiosity users compared to non-Studiosity users*

University	A	B	C	D	E	F
Continuation rate users	97%	96%	100%	94%	96%	98%
Continuation rate non-users	96%	87%	74%	82%	95%	97%
Progression rate users	95%	85%	92%	N/A	96%	88%
Progression rate non-users	85%	72%	78%	N/A	93%	89%

* ■ = significant difference

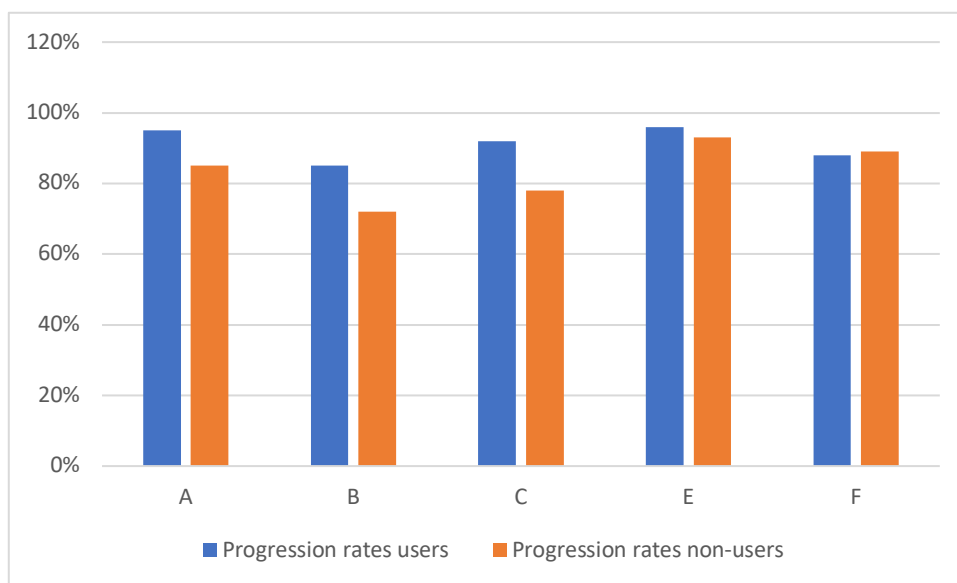
In every university the student continuation rate was higher amongst Studiosity users than the non-users (see Chart 3), and this difference is significant in three institutions (B, C and D; $p < 0.0001$; $p = 0.0001$; $p < 0.001$).

Chart 3: Comparison of continuation rates between Studiosity users and non-users



In four of the five universities that provided progression data, the progression of Studiosity users is higher than the progression of non-users of Studiosity, and in three of the institutions (A, B and C) this is significant ($p < 0.0001$; $p < 0.0001$; $p = 0.0221$). This is shown in Chart 4.

Chart 4: Comparison of progressions rates between Studiosity users and non-users



The single largest determinant of non-completion is entry tariff (Smith and Naylor 2001, HEFCE 2013); and as discussed above, entry tariff data was received from three of the institutions (A, B and C), and presented in Table 2. In institutions A and C high tariff students made significantly more use of Studiosity, and so this may contribute to the higher rates of continuation and progression (although institution A also had significantly higher use by mature students, who have lower rates of continuation and progression). Institution B is particularly interesting, as only 4% of Studiosity users were high tariff (compared to 3% of the target population and 3% of non-Studiosity users), and in this institution both the continuation and the progression rates of Studiosity users were significantly better than for non-Studiosity users ($p < 0.0001$). It is also worth noting, that with the exception of male students and low tariff students, institution B has significant ($p < 0.0001$) use by student groups that tend to have lower rates of completion: mature students and disadvantaged students (POLAR 4 and IMD quintiles 1 and 2); and significant non-use by student groups that have higher rates of completion: white students and students with no disability (see HEFCE 2013 for analysis by widening participation target groups). The data from this institution relates to 965 Studiosity users from a total eligible population of 8,166, and so is the biggest sample in the pilot study.

Conclusions

The analysis of institutional participation data demonstrates differential rates of use of Studiosity, varying between 4% and 25% of eligible level 4 undergraduate cohorts. This suggests that there is scope to improve usage rates in at least some institutions. In general men and young students are less likely to use the service than women and mature students, and the variation is likely to result from how the service is presented to students and by whom. The high uptake by mature students is very pleasing. Data from two institutions suggests less well qualified entrants (based on entry tariff data) are less likely to use Studiosity. With regards to other equity groups the picture is mixed, but there is some evidence to support greater engagement by non-White students, disabled students, disadvantaged students and part-time students, but the evidence is inconclusive. The lower than expected use by men and students with low entry tariffs warrants further research to check if this is the case more generally, and to understand why students are and are not choosing to use Studiosity.

The analysis of institutional outcomes data indicates that Studiosity use is correlated with higher rates of continuation, and usually with higher rates of progression, with significant findings in four of the six institutions (A, B, C and D). This analysis does not take into account the demographics of the users, to help explain this variation, and the data available is limited. Institution B, which has the largest user group presents encouraging evidence that using Studiosity significantly improves continuation and progression as they did not have significantly higher use by high-tariff students, and they did have equivalent or better use by groups with lower rates of completion (mature students and disadvantaged students) and lower rates by student groups with higher rates of completion (white and non-disabled students), and significant differences in the continuation and progression rates of Studiosity users compared to non users ($p < 0.0001$). This indicates that Studiosity is making a positive contribution to improving continuation and progression, especially but not exclusively in relation to mature students. In conclusion, Studiosity warrants serious consideration by higher education institutions wishing to improve level 4 continuation and progression. Implementation should be accompanied by effective promotion to students who potentially could benefit the most, and further institutional analysis to better understand the trends identified here.

Recommendations

1. Institutions wishing to improve undergraduate continuation and progression, especially, but not exclusively of mature students, should consider using Studiosity.
2. Studiosity and/or institutions should undertake further research to understand more about why the take-up rate varies between institutions, and how specific groups (particularly male students and students with low entry tariffs) can be encouraged to make more use of Studiosity.
3. Institutions should actively encourage users from groups with lower rates of continuation and progression to use Studiosity (students with low entry tariffs, males, mature students, non-white students, students with disabilities, disadvantaged students and part-time learners).
4. Institutions should undertake individual level analysis of the continuation and progression data of users and non-users of Studiosity to provide further insights into the impact of the service on student completion.
5. Studiosity or institutions should examine the Studiosity take-up rate in general and by particular groups, and the persistence (continuation and progression) of students using and not using Studiosity when more learning is taking place online.

References

HEFCE (2013). Higher education and beyond. Outcomes from full-time first degree study. 2013/15. Bristol: HEFCE.

Smith, J. and Naylor, R. (2001) Dropping out of university: A statistical analysis of the probability of withdrawal for UK university students, *Journal of the Royal Statistics Society: Series A (statistics in society)*, vol. 164, no. 2 pp389-405

Thomas, L (2012) Building student engagement and belonging in Higher Education at a time of change. Final report from the What works? Student retention and success programme. London: Paul Hamlyn Foundation <https://www.phf.org.uk/publications/works-student-retention-success-final-report/>

UUK (2019) Higher Education in facts and figures 2019, London: Universities UK

Warren, D. (2003) Developing academic literacy: a discipline-based approach. *Investigations in university teaching and learning*, 1 (1). pp. 46-51. ISSN 1740-5106

Woodfield, R. and Thomas, L. (2012) Male students: engagement with academic and pastoral support services, London: Equality Challenge Unit.

Appendices – Institutional level data

Institution A	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	9,722		875	9%		8,847		9722	
*High entry tariff: > 390	640		80	13%	12%	560	8%	640	p=0.0003
*Low entry tariff: < 280	2,494		184	7%	27%	2,310	32%	2494	p=0.0076
*Sex: Male	3,373	43%	174	5%	26%	3,199	45%	3373	p<0.0001
*Age on entry: 21+	1,255	16%	178	14%	26%	1,077	15%	1255	p<0.0001
*Ethnicity: White	5,194	66%	452	9%	67%	4,742	66%	5194	p=0.5
*No known disability	7,014	90%	606	9%	90%	6,408	90%	7014	p=1
*POLAR 4: Q1&Q2	2,015	26%	145	7%	21%	1,870	26%	2015	p=0.0044
*IMD: Q1 & Q2	3,458	44%	307	9%	45%	3,151	44%	3458	p=0.6
Mode of study: Full-time	7,989	82%	679	8%	78%	7,310	83%	7989	p=0.0002
*Number of level 4 students who completed the year (continuation rate)	7,490		655	9%	97%	6,835	96%	7490	p=0.2
*Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)	6,752		641	9%	95%	6,111	85%	6752	p<0.0001

* Full-time students

Liz Thomas Associates Ltd
 Studiosity: Student participation and the impact on persistence in the UK

Institution B	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	8,166		965	12%		7,201		8166	
High entry tariff: > 390	239	3%	36	15%	4%	203	3%	239	p=0.09
Low entry tariff: < 280	3013	37%	260	9%	27%	2753	38%	3013	p<0.0001
Sex: Male	3834	47%	266	7%	28%	3568	50%	3834	p<0.0001
Age on entry: 21+	2052	25%	334	16%	35%	1718	24%	2052	p<0.0001
Ethnicity: White	6314	77%	717	11%	74%	5597	78%	6314	p=0.0052
No known disability	6432	79%	738	11%	76%	5694	79%	6432	p=0.0327
POLAR 4: Q1&Q2	3606	44%	484	13%	50%	3122	43%	3606	p<0.0001
IMD: Q1 & Q2	1755	21%	262	15%	27%	1493	21%	1755	p<0.0001
Mode of study: Full-time	7435	91%	910	12%	94%	6525	91%	7435	p=0.0018
Number of level 4 students who completed the year (continuation rate)	7206	88%	922	13%	96%	6284	87%	7206	p<0.0001
Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)	6029	74%	821	14%	85%	5208	72%	6029	p<0.0001

Liz Thomas Associates Ltd
 Studiosity: Student participation and the impact on persistence in the UK

Institution C	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	619		48	8%		571		619	
High entry tariff: > 390	44		42	95%	88%	2	0%	44	p<0.0001
Low entry tariff: < 280	485		40	8%	83%	445	78%	485	p=0.4
Sex: Male	250	40%	12	5%	25%	238	42%	250	p=0.02
Age on entry: 21+	129	21%	14	11%	29%	115	20%	129	p=0.1397
Ethnicity: White	267	43%	16	6%	33%	251	44%	267	p=0.1
No known disability	552	89%	46	8%	96%	506	89%	552	p=0.12
POLAR 4: Q1&Q2	91	15%	6	7%	13%	85	15%	91	p=0.7
IMD: Q1 & Q2	236	38%	15	6%	31%	221	39%	236	p=0.2
Mode of study: Full-time	597	96%	48	8%	100%	549	96%	597	p=0.1
Number of level 4 students who completed the year (continuation rate)	473		48	10%	100%	425	74%	473	p=0.0001
Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)	487		44	9%	92%	443	78%	487	p=0.0221

D

Liz Thomas Associates Ltd
 Studiosity: Student participation and the impact on persistence in the UK

Institution D	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	1107		277	25%		830		1107	
High entry tariff: > 390							-		
Low entry tariff: < 280							-		
Sex: Male	524	47%	95	18%	34%	429	52%	524	p<0.0001
Age on entry: 21+	382	35%	97	25%	35%	285	34%	382	p=0.7615
Ethnicity: White			264		95%			264	
No known disability	877	79%	196	22%	71%	681	82%	877	p=0.0001
POLAR 4: Q1&Q2	420	38%	132	31%	48%	288	35%	420	p=0.0001
IMD: Q1 & Q2	125	11%	30	24%	11%	95	11%	125	p=1
Mode of study: Full-time		0%	270		97%			270	
Number of level 4 students who completed the year (continuation rate)	942		260	28%	94%	682	82%	942	p<0.0001
Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)									

E

Liz Thomas Associates Ltd
 Studiosity: Student participation and the impact on persistence in the UK

Institution E	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	1258		54	4%		1204		1258	
High entry tariff: > 390							-		
Low entry tariff: < 280							-		
Sex: Male	752	60%	17	2%	31%	735	61%	752	p<0.0001
Age on entry: 21+	61	5%	7	11%	13%	54	4%	61	p=0.0016
Ethnicity: White	809	64%	36	4%	67%	773	64%	809	p=0.6
No known disability	1135	90%	49	4%	91%	1086	90%	1135	p=0.8
POLAR 4: Q1&Q2	93	7%	2	2%	4%	91	8%	93	p=0.2
IMD: Q1 & Q2	71	6%	1	1%	2%	70	6%	71	p=0.2
Mode of study: Full-time	1258	100%	54	4%	100%	1204	100%	1258	n/a
Number of level 4 students who completed the year (continuation rate)	1201	95%	52		96%	1149	95%	1201	p=0.7
Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)	1168	93%	52		96%	1116	93%	1168	p=0.39

F

Liz Thomas Associates Ltd
 Studiosity: Student participation and the impact on persistence in the UK

Institution F	Total Number (TN)	% of TN	Studiosity Users (SU)	% SU of TN	% SU	Non-Studiosity Users (NSU)	% NSU	Total Users	Statistical Significance (p<0.05)
Number of level 4 students enrolled on 1 st December 2018 who were eligible to use Studiosity	11,874		867	7%		11,007		11874	
High entry tariff: > 390							-	-	
Low entry tariff: < 280							-	-	
Sex: Male	4620	39%	184	4%	21%	4436	40%	4620	p<0.0001
Age on entry: 21+	5078	43%	556	11%	64%	4522	41%	5078	p<0.0001
Ethnicity: White	7259	61%	826	11%	95%	6433	58%	7259	p<0.0001
No known disability									
Deprivation data Q1&2	1758	15%	140	8%	16%	1618	15%	1758	p=0.4282
Mode of study: Full-time	7634	64%	104	1%	12%	7530	68%	7634	p<0.0001
Number of level 4 students who completed the year (continuation rate)	11572	97%	852	7%	98%	10720	97%	11572	p=0.0926
Number of 2018-19 level 4 students who progressed to level 5 in 2019-20 (progression rate)	10555	89%	761	7%	88%	9794	89%	10555	p=0.3

Acknowledgements

Research design and report: Liz Thomas, independent consultant

Statistical analysis: Maxine Brodie, independent consultant

Research, analysis and report commissioned by Studiosity

To cite this report

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

For further details about this report please contact:

Professor Liz Thomas

Liz Thomas Associates Ltd

www.lizthomasassociates.co.uk

liz@lizthomasassociates.co.uk

© Liz Thomas Associates Ltd, 2020