

# **A Flying Start for all undergraduate students**

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## 6.3

**Title:** *A Flying Start* for all undergraduate students

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**Courses:** Undergraduate courses across Coventry University.

### **Introduction:**

Since 2012, Coventry University's Flying Start scheme has provided a package of items to students at each stage of their undergraduate degree. The scheme is an important part of the University's transformative learning agenda, helping to ensure equity of access to a wide variety of items for students to support use of different technology, self-study and blended approaches, innovation and digital fluency.

### **Aims and rationale:**

Like other educational institutions in England (HEFCE 2014, Jones 2017, Smith et al. 2017) Coventry University sees disparities of attainment when looking at factors such as gender, ethnicity, and between domicile and non-domicile students. A key aim of the Flying Start scheme is to support widening participation and equity of attainment by making sure that all students have access to the items. The items are selected by course teams to provide key things that are essential for students to complete their programme, for example art materials and protective clothing. Employability-related items such as professional body memberships can also be provided. Many programmes also issue software and/or hardware, which allows academics to develop digital fluency and technological skills without concerns that some students might otherwise not have access.

### **Implementation:**

Most courses include some reading material and books/eBooks are the most common items. These allow staff to utilise these for flipped and blended approaches to learning by ensuring that all students have access to appropriate materials regardless of their financial status. We have supported staff to develop custom textbooks and readers aligned well to module/ course content to improve the student experience of working independently outside of class and to enable staff to integrate different types of materials and activities into these books. In the final year of undergraduate study, students are provided with vouchers that can be used to buy books so they can tailor titles to their project/dissertation. Extensive feedback (from 6,800 students in 2018-19) shows the scheme is generally very well received and valued by students. In this case study, we will discuss how we have used detailed feedback and data from several sources to help us to refine the existing scheme and to inform the design of a modified scheme starting in 2019-2020.

We have collected data to help us to understand how effectively the items were supporting the different groups, and all data collection and analysis had ethical approval from Coventry University. We aligned the variables collected with those being used by other extensive equity projects at the university. The following existing data sets were used:

- Demographic data from registry for students issued accounts for eBooks and/ or book vouchers
- Data from our eBook platform after end of teaching weeks for the year, including whether students had registered their accounts, total pages read, total number of searches. (n=2800 students)
- Data on the use of book vouchers for final year students at end of teaching weeks for the year [n=3481 students with vouchers of value about £800,000], including whether they registered their account, percentage of allowance spent and specific titles purchased

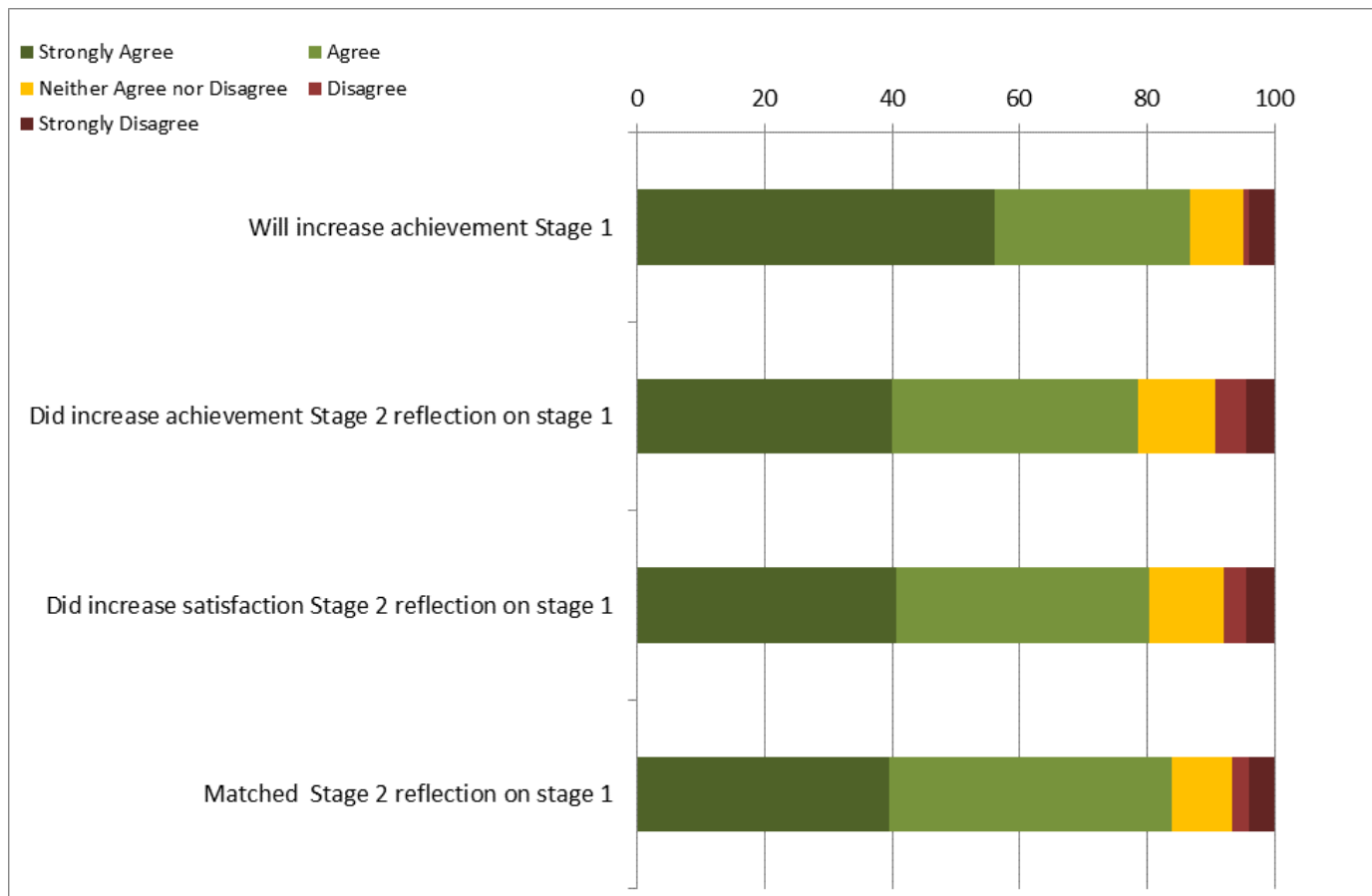
The following data was collected in 2014-15, 2016-17, 2017-18 and in 2018-2019 (only 300 students representing 5% of the sample, made comments, so we have not attempted any quantitative thematic evaluation of these):

- Questionnaire with Stage 1 students in induction about their knowledge of the scheme and how they thought items **would** help [N= 4519 in 2018-19]
- Questionnaire in first teaching week with Stage 2 students about how they had used items in year one, how their lecturers had used items and the impact they believed flying start had on their achievement and satisfaction [N =2119 in 2018-19]
- Focus group organised via the students' union with student representatives in April 2018
- Questionnaires were anonymous but collected key demographic information including gender, ethnicity, overseas or home fees. For students with a home postcode in England deprivation decile was derived using English Indices of Deprivation 2015 (<http://opendatacommunities.org/data/societal-wellbeing/imd/>)

## Do students report that flying start increases their satisfaction and achievement?

Stage 1 students were asked if they thought items WOULD help their achievement and Stage 2 asked if items DID help their achievement the previous year when they were first-year students. In 2018 overall 87% of Stage 1 students agreed or strongly agreed that items would help their achievement (Figure 1) and 81% of Stage 2 students agreed or strongly agreed that the items helped to improve their satisfaction (Figure 1 below).

Figure 1. Student responses to questions about how Flying Start items improved their achievement/ satisfaction and if they matched the course needs well:



Although 75% of Stage 2 students reported that items did improve their achievement, the percentage of Stage 1 students who thought items would improve their achievement was higher (87%, Figure 1 above) and the difference in percentages of students who strongly agreed with the statements is even larger (56% Stage 1, 40% Stage 2). We have seen this same pattern in data from previous years and we are trying to understand why we have seen this discrepancy between how much impact the students think the items will have and the actual impact on achievement.

## Are we selecting appropriate items?

How strongly students believe items improve achievement and how much they use items will be linked to how useful they believe the items are. 83% of students agree or strongly agree that items matched the course well (Figure 1 above), which shows that generally course teams are selecting appropriate items. We found a strong, significant relationship ( $R=0.71$ ,  $P<0.0005$ ), between how strongly students agreed that items matched their course needs well and how much they agreed items improved their achievement. This suggests that selecting appropriate items is important.

Figure 2 (below) shows the percentage of Stage 2 students reflecting on Stage 1 who strongly agreed the items matched their course needs well. We carried out the first large scale evaluation of the scheme in 2014-15 and at that time only 25% of students strongly agreed with this statement when reflecting on the 2013-14 academic year. In response to this data, the Faculty Deanery teams worked with all academic areas to improve this, especially in the two faculties with the lower scores (17% and 21%). In some cases, different items were selected, but in other areas the problem was tackled effectively by working with the students to make sure they did understand why the items were important and ensuring that academic staff were referring to and using the items more. As a result of these interventions, scores improved dramatically and in 2017 and 2018 we had 37% and 41% of students strongly agreeing items were appropriate. In 2018, our focus group study confirmed that students generally thought items were well chosen, with specific software, hardware items and custom texts particularly valued.

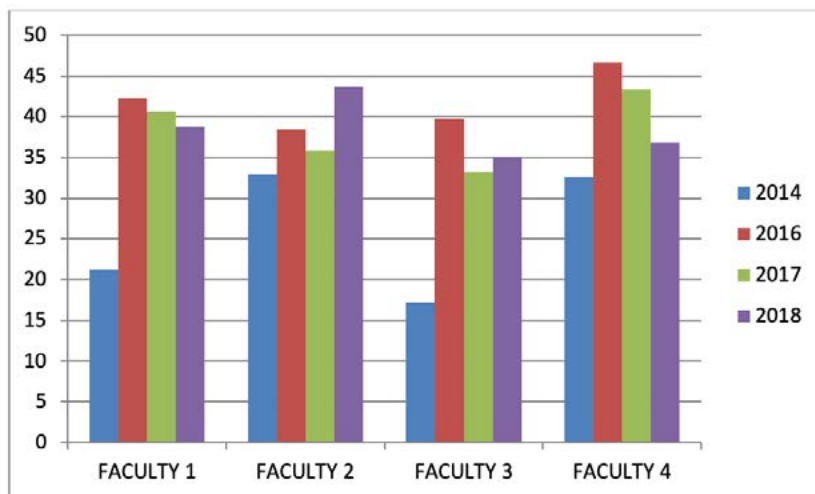


Figure 2. The percentage of stage 2 students reflecting on their stage 1 experience who strongly agreed that the items matched the course needs well:

### Strengths and weaknesses:

Although the data above shows that *Flying Start* has been very successful in improving student satisfaction and that most students believe it contributes to their achievement, it was important to check if it worked equally well for all student groups.

Data from a range of sources is shown in Table 1 (below), including student beliefs about whether items will/did help achievement and how often they reported they used items and objective data from the eBook system and the online shop voucher system. This shows the difference between the mean percentage for the whole cohort and the value for the specific group. The colour coding allows us to see that some groups are showing clear patterns of being above (green) or below (red) the mean across most data sets.

The relationship between measures of deprivation and student achievement in Higher Education is complex. We have used deprivation decile (see above) but have not seen a consistent pattern when comparing responses and behaviour in students (Table 1, below).

Thirty-five per cent of Stage 1 students agree or strongly agree that they could not afford the items if they were not provided and there was a strong negative relationship between deprivation decile and the response to this question. Therefore, for Stage 1 students those in the most deprived deciles are most likely to say they cannot afford them. In Stage 2 the percentage of students who agree or strongly agree they could not afford to buy the items is much higher, at 60%. Here we do not see a relationship between deprivation decile and the answer given, so students from all deprivation deciles are equally likely to say they cannot afford them. Some universities who provide items do so only in the first year of a course. However, our findings support us issuing *Flying Start* items across the whole course. They also show that it is important to provide items for all students not just those who may appear to be most in financial need. Stage 2 students from the following groups had a greater than 3% lower percentage of respondents who strongly agreed that items helped their achievement (see Table 1 below):

- Males
- Overseas students
- Asian and Chinese students
- Students whose first language was not English

One reason why items might not help achievement is if the students did not think the items would be useful. However, males, Asian students and students whose first language is not English did not have a lower percentage of students who thought the items would help. However, Chinese and overseas Stage 1 students were considerably less likely to strongly agree the items would help them. Understanding why these students did not see as much value in the items would be useful. Discussions with the focus group suggested that academic staff should do more to help students understand how to use items well.

## Do students use the items?

Table 1 (below) includes information about how often students reported they used the items. It also includes objective data from the eBook system and online voucher system, showing what percentage of students registered to use these and how much they were used.

We would expect to see a relationship between how much students agreed items improved their achievement and how frequently they reported they used items in private study, however, although statistically significant this relationship was weak ( $R= 0.34$ ,  $P<0.0005$ ). Males, overseas students, Asian students and Chinese students, who all had a lower percentage of students who strongly agree the items improved their achievement, had a lower percentage of students who said they used the items every week or most weeks.

Table 1. The variance in percentage of students from specific groups compared to the overall mean for the whole cohort. Values 3% or more above the mean are coloured green, values 3% or more below the mean are coloured red. Grey boxes indicate that the data is not available for that measure:

		Stage 1 2018- %	Stage 2 2018- reflecting on their 1st year in 2017-18 %		All applicable students in 2017-18			
		Strongly agree Items WILL help improve achievemen t	Strongly agree items DID help achievemen t	% used items in private study every/ most weeks	%registered for <u>Kortext</u> ebooks	mean pages read by those who did register	% registered for online shop	% spent by those who did register
Gender	Female	4	3	4	5	-2	8	1
	Male	-2	-4	-3	-8	7	-9	-1
Entry Quals	A Level	1	1	1				
	Access	6	5	13				
	BTEC	1	2	-1				
Fee Status	Home	1	3	2	1	0	3	2
	Overseas	-13	-10	-10	-8	-5	-7	-4
Ethnicity	Asian	1	-3	-4	-3	21	1	-2
	Black	9	1	1	-10	0	-1	-2
	Chinese	-15	-6	-10	-14	-38	-5	-6
	White	-1	3	4	7	-2	4	4
English as first Language	Yes	1	2	3				
	No	-1	-4	-2				
Deprivation decile	1 to 3	2	-1	2	2	-2	1	2
	4 to 6	2	3	-1	0	-16	3	2
	7 to 10	-4	0	3	13	-2	-1	2
Enrolment date	On time				2	-2	1	2
	1 week late				-23	0	-18	-12
	2 week late				-14	-50	-5	1
	late							

However, those who did not have English as their first language did not show the same pattern. Similar patterns in the data were seen for the percentage of students registered for eBooks and registering for the online shop, with the exception of Asian students, who were not less likely to do this. This suggests that for males, overseas students and Chinese students, part of the reason they are less likely to say items improved achievement may be because they are using them less. Understanding the reasons for this is important. We discussed this data with our focus group in 2018 and they suggested that having items that were easy to read, including short, summary texts and customised texts that followed the module content well was important. They also stressed the role of academic staff in setting specific tasks. The university has a parallel project that is trying to decolonise the curriculum, including greater author and content diversity in reading materials, which has also been shown to influence how accessible some items are to specific groups (Stevenson 2012).

Although some groups are less likely to register for the systems, once they are registered, they are not necessarily engaging less. For the eBook system, male and Chinese students did have a lower mean number of pages read but the overseas students had a value very close to the overall mean and the Asian students had the highest mean pages read of any group. For students who did register for the online shop, males and females had very similar mean percentage of funds spent but overseas and Chinese students did have lower spends. This data suggests that for some groups once they are engaging with a system they do use it as much as other students. This means we should focus on making sure students are aware of the system and encouraging and helping them to use it. It should be noted that students who enrol late were considerably less likely to register with the eBook and voucher system and less likely to use it once registered and we need to do more to help this group.

In 2017-18, only 61% of students registered for the eBook system. In response, we provided additional staff training sessions in the summer and additional resources for staff to use with their students, including one-page summary leaflets as well as the existing more extensive handbook. Because the importance of peer support and role models has been previously highlighted (Stevenson 2012) we also recruited student ambassadors, including some BME students, who had used the system the previous year to provide a drop-in help desk for staff and students during the first few weeks of the semester. These actions have resulted in a 12% increase in the percentage of students registering in 2018-19. For future development of the scheme we are trying to remove barriers to online systems by providing access via students' university login credentials and embedding links in our VLE.

### **Role of academic staff**

Previous studies looking at ethnicity and attainment have shown while lower achievement is partly related to factors such as language and study skills, lower achievement is not inevitable (Jones 2017), but rather it can be influenced by factors relating to teaching and learning impact (Stevenson 2012). There were statistically significant, moderate correlations between students answers for how often students used items in private study and how often staff referred to items in class ( $R=0.51$ ,  $P<0.0005$ ) and staff set specific homework tasks using items ( $R=0.51$ ,  $P<0.0005$ ). This supports the idea that the behaviour of academic staff may be a factor in how often students use the items. There was also a significant, moderate ( $R= 0.54$ ,  $P<0.0005$ ) relationship between how often students said they used items in class and how often they used them in private study.

It is clear from the literature that BME students may have different study approaches (Jones 2017), be less likely to ask for help (Stevenson 2012), and feel they have a 'lack of preparedness' for Higher Education. But they also believe it is the role of academic staff to help them to develop skills to work independently (Stevenson 2012). Focus group meetings last year and student comments this year show that students particularly value having weekly tasks set and having 'custom books' that are well aligned to the module order and content. Some students made specific comments about this:

'I believe books should be referenced in lectures more often and lecturers should emphasize the importance of books.'

'Please make [books] relevant to lecture content.'

Our evaluations are considered at university level in our quality committee and this has given us strategic management level support for actions to increase the number of academic staff who are setting regular tasks with the items, including running training via Organisation Development and providing summary leaflets for staff about key data and actions needed. Each academic area also receives details of feedback from their own students, including comments, to help them prioritise actions needed. The quality committee has also incorporated questions about Flying Start items and their use in course development and evaluation processes.

### **Positive outcomes:**

For 2019-20 we are applying our findings to making some changes to the scheme, with an eBook rental model. This will allow students access to many more books. However, it is clear from the information above that just providing a lot of items does not guarantee they will be used well by students. We have used key findings to provide training and resources for academic staff on how they can help their students get the most out of the scheme including:

Consider 'Custom books', which are well-aligned to module/course content:

- Select items that support students who do not have strong English language skills, or who have other problems reading long texts, including short summary texts and technical dictionaries etc.
- Set specific tasks with the items in the classroom to ensure students can access and use them
- Set specific tasks for students to work on out of class using the items

An analysis of the books students bought with vouchers for the online shop last year showed some buy the following types of titles:

- Books to support specific study skills
- Books to support mental health and wellness
- Books related to employability skills

For the new scheme we are working with welfare, employability and other areas of the university to include an appropriate set of resources that will be available to all students.

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