



## Articulation from Scottish Colleges to Scottish Universities 2017-18 (Experimental Statistics)

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Summary: The purpose of this publication is to provide information on movement from college to university across articulation pathways and to provide figures for levels of accreditation for prior learning.

FAO: Principals / Chairs / College and University Planners / Finance Directors / Students / Parents, Guardians / General Public

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*The UK Statistics Authority has designated these statistics as 'Experimental Statistics: data being developed' which are defined in the Code of Practice for Official Statistics as new official statistics undergoing evaluation that are published in order to involve users and stakeholders in their development as a means to build in quality at an early stage.*



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## Executive summary

1. This is the first publication of the revised National Articulation Database (NAD) which has been under development by SFC. This publication reports on the articulation of college HNC/HND students, their movement to Scottish HE institutions and the prior academic credit they attain.
2. Measures are based on students who articulate within three years of completion of their college course<sup>1</sup> in order to give a consistent measurement of articulation. The key focus is on **Advanced Standing**, where a student gets full academic credit for the prior learning.

The headline figures for articulation year 2017-18 are as follows:

- 51.4% gained Advanced Standing as measured for National Outcome Agreement Measure 7 (4,021/7,826).
- 64.3% gained Advanced Standing from HNDs (2,875/4,468).
- 34.1% gained Advanced Standing from HNCs (1,146/3,358).
- 47.6% female students gained Advanced Standing (2,102/4,415).
- 56.3% male students gained Advanced Standing (1,919/3,409).
- 26.1% of First Degree entrants arrived via the HNC/HND college route.
- 41.8% of First Degree entrants from the most deprived SIMD quintile (MD 20) arrived via the HNC/HND college route.
- Black and Minority Ethnic (BME): accounted for 9.2% of Advanced Standing; 7.8% of all articulating students were reported as BME.
- Disability: accounted for 15.3% of Advanced Standing; 17.6% of all articulating students were reported as disabled.
- Care-experienced: accounted for 1.1% of Advanced Standing; 1.3% of the articulating population were reported as care-experienced.
- Carers: accounted for 0.4% of Advanced Standing; 0.5% of the articulating population were reported as carers.

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<sup>1</sup> See section on [Measuring Articulation](#).

# College and University Articulation Data 2017-18

## Key Statistics

- **51.4%** with Advanced Standing (4,021):  
*National Outcome Agreement Measure 7, p.13*
- **64.3%** gained Advanced Standing from HNDs, p.16
- **34.1%** gained Advanced Standing from HNCs, p.15



- **26.1%** of First Degree entrants arrived via the HNC/HND college route, p.14
- **41.8%** of First Degree entrants from the most deprived SIMD quintile (MD 20) arrived via the HNC/HND college route, p.19

## Introduction

3. This publication provides information on articulation between Scotland's colleges and universities and is part of the work to map learner journey pathways and widen access to Higher Education Institutions (HEIs). It supports the Scottish Funding Council's (SFC) work with colleges and universities on outcome-based planning through Outcome Agreements<sup>2</sup> as well as the Commission on Widening Access (CoWA)'s recommendations on articulation<sup>3</sup>. The aim of revising the National Articulation Database has been to construct a fact-based dataset to improve decision-making and collaboration across the tertiary education sector.
4. The redevelopment of the National Articulation Database undertaken by SFC has involved development of an NAD dashboard which will be issued to the colleges and universities when this is published. The dashboard has been developed to allow accessible information mining from the NAD to facilitate collaborative fact-based working between colleges and universities to better understand the articulation landscape and widen this key policy area.
5. We will continue to develop the data matching to improve the completeness and robustness of these data and to continue to work closely with the colleges and universities to further articulation.
6. We would welcome feedback on the above and any other aspects of the report in order to improve the quality and usefulness for users – contact details on title page.

Note: figures below five have been removed from this publication to protect anonymity.

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<sup>2</sup> [College OA Annex B technical guidance \[PDF\]](#) (Measure 7)

[University OA Annex B technical guidance \[PDF\]](#) (Measure 1)

<sup>3</sup> [A Blueprint for Fairness, CoWA \(2016\) \[PDF\]](#) (Recommendations 9 and 10)

## Articulation definition

7. Articulation is concerned with recognition of prior learning and receiving credit for this learning to optimise learner journeys. The main academic courses discussed in this publication are college HNCs and HNDs which are the principal HE level qualifications in the college sector.

8. SFC's Access and Inclusion Committee's (AIC) definition (paragraph 8)<sup>4</sup> is:

*"Articulation is defined as a student gaining entry into second year of a degree with a Higher National Certificate (HNC) gained at college, or into third year with a Higher National Diploma (HND) gained at college."*

The endeavour of the articulation strategy is to ensure as far as possible that students are not required to repeat a level of study when they begin university. Towards this end programmes of study between college and universities are evaluated and aligned to take advantage of a pathway from HNC to second year of university or to third year for HNDs.<sup>5</sup>

9. In 2012-13 the original National Articulation Database<sup>6</sup> indicated 7,677 students moved from college to university in Scotland from HNC/HND. In 2013-14 SFC introduced the Associate Students Scheme to increase articulation numbers by up to 1,000 places a year. By 2017-18 the revised National Articulation Database shows 9,763 moved to university from these college qualifications. The Associate Student Scheme was not explicitly limited to HNC/HND movement to university and we see other avenues have also developed to enable university education to be delivered seamlessly commencing in college with completion at university. These avenues fall beyond the scope of this publication but do provoke the need for discussion about the definition of articulation from a policy perspective.

10. Levels of articulation are calculated based on the college qualification and the year of the university programme into which the college student moves. The following tripartite classification of prior learning is used:

- Advanced Standing (AS) - full academic credit for prior study.
- Advanced Progression (AP) - partial credit for prior study.
- Progression (P) - no credit for prior learning [or Flexible OU Progression].

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<sup>4</sup> <http://www.sfc.ac.uk/access-inclusion/articulation/articulation.aspx>

<sup>5</sup> Note: progression (entry to year one of university study) is also included in this paper to contextualise all HNC/HND movement to universities.

<sup>6</sup> The original National Articulation Database (NAD) was developed to monitor student articulation from HNC/HND to university study. Now obsolete, a revised NAD has now been developed by the SFC based on a completely data-driven system which improves accuracy and consistency in tracking articulation.



11. Flexible Open University (OU) Progression offers a unique model of flexible, part-time higher education where articulating students can apply for credit transfer before commencing their OU studies or at any time during their degree. Flexible OU Progression at present includes students articulating with full (AS) and partial (AP) academic credit as well as those who are progressing without transferring credit. We are working with the OU to refine the representation of OU students across the articulation levels for the 2018-19 National Articulation Database and publication.
12. In terms of the HNC/HND products these classifications are applied as follows:

Table 1: Articulation Levels from HNC/HND by University Year of Study

	Year 1	Year2	Year 3
<b>HNC</b>	P	AS	-
<b>HND</b>	P	AP	AS

13. As Table 1 shows Advanced Standing differs in year of application between the HNC and HND. For example, an HND student entering year two will have undertaken study at SCQF level 8 (equivalent to year two at university) which they will repeat if they enter university into year two. In this situation the HND student would only be gaining partial academic credit (Advanced Progression) where someone moving into university year two from an HNC would gain full academic credit (Advanced Standing) since no level is repeated. The articulation classification is therefore not concerned with absolute placement of students in a given year but instead identifies where maximum possible credit for prior learning has occurred and where there is no duplication of learning level.
14. Our considerations of articulation now include HNC/HND students from the University of the Highland and Islands (UHI) as well as from Scotland’s Rural College (SRUC) who move on to other HEIs<sup>7</sup>. Figures do not include HNC/HND students from these HEIs who move on to degree courses within the same institution.
15. There are also some instances where an individual may articulate to an HEI and then drop out and articulate again to another HEI in a subsequent year. In these cases articulation is counted for each HEI.
16. It should be noted that this is a publication based on experimental data. In developing the data on articulation there will be a necessary period where

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<sup>7</sup> Note: HE-level study is collected by HESA and not FES for UHI and SRUC.

colleges and universities will work to align the data for their articulating students with the requirements needed for the revised articulation coding to achieve more consistent reporting of provision. Data alignment will be carried out going forward to resolve this.

17. It should also be noted there is a substantial number of individuals excluded from the data who do not fit the current definition of articulation. For example, the University of Strathclyde has 200 students who completed HNCs (SCQF 7) followed by an SCQF level 8 Diploma of Higher Education in a related discipline before the student articulated into the third year of a degree at Strathclyde.
18. These pathways are beyond the scope of currently-defined articulation and highlight that articulation is only one of many valid educational pathways college students are pursuing into universities. [Table 15](#) shows numbers of students by institution who gained HN qualifications and articulated to university but who are excluded from the NAD due to lack of correlation between the HN level and the subsequent articulation level, e.g. HNC moving to year three study like those from Strathclyde.

## Overall HNC/HND College to University movement 2014-15 to 2017-18

19. This publication is concerned with Scottish-domiciled students<sup>8</sup> with deviations from this noted in any sections where this is not the case. “Overall” figures include all available years of data on both active articulation pathways<sup>9</sup> and non-articulation pathways. Figures for HNC and HND individually are also included in the Table 2.

Table 2: University Movement Figures for All, HNC and HND (overall)<sup>10</sup>

	Advanced Standing	Advanced Progression	Progression	Total
<b>(All)</b>				
<b>2014-15</b>	3,674	878	4,330	8,882
<b>2015-16</b>	4,061	887	4,047	8,995
<b>2016-17</b>	3,895	723	4,445	9,063
<b>2017-18</b>	4,233	832	4,698	9,763
<b>HNC</b>				
<b>2014-15</b>	971	-	2,936	3,907
<b>2015-16</b>	1,140	-	2,961	4,101
<b>2016-17</b>	1,109	-	3,032	4,141
<b>2017-18</b>	1,255	-	3,248	4,503
<b>HND</b>				
<b>2014-15</b>	2,703	878	1,394	4,975
<b>2015-16</b>	2,921	887	1,086	4,894
<b>2016-17</b>	2,786	723	1,413	4,922
<b>2017-18</b>	2,978	832	1,450	5,260

20. As stated, these overall figures include those moving to university using their HNC/HND course as an entry qualification in a new subject area. Such students will be starting in the first year of the degree programme and are thus repeating a level of study - see [Table 3](#). However, this can be seen positively as

<sup>8</sup> Any student recorded in the HESA Student return as being permanently domiciled in Scotland prior to starting their course.

<sup>9</sup> Articulation Pathways are pathways where college and university subjects have yielded prior-learning accreditation. Non-pathways are where no student traversing the college to university subject has had prior learning accredited.

<sup>10</sup> Overall figures pertain to articulation for all Scottish-domiciled students on both articulation pathways and non-pathways.

it demonstrates that college education allows students to find the correct paths for what inspires them both educationally and towards careers.

Table 3: HNC/HND numbers on non-pathways 2014-15 to 2017-18 (overall)

	HNC	HND	TOTAL
2014-15	470	285	755
2015-16	490	309	799
2016-17	555	314	869
2017-18	609	377	986

### Measuring articulation

21. The overall counts for articulation are of limited value for articulation measurement since figures for HN-study to HEIs are not comparable over time due to some years benefiting from a longer trailing period. For example, articulation year 2014-15 has input from six years of Further Education Statistics (2008-09 to 2013-14) whereas 2017-18 benefits from nine years (2008-09 to 2016-17) – see [Table 16](#) in the Annex. It is therefore appropriate to manage the data to allow directly comparative measurement between articulation years.
22. It is also important to consider the time between qualifying at college and starting at university since continuity of learning is important in seeing a learner journey as continuous and not as a number of discrete learner episodes. Keeping a shorter trailing period from articulation years also has the benefit of highlighting active articulation pathways instead of the individual routes found as the gap increases.
23. On this basis, the following *Parameters of Articulation Measurement* are used to compare data from the revised NAD on a consistent basis:
  - Scottish-domiciled.
  - On articulation pathways.
  - With a maximum three-year gap between HN and attending university (three-years trailing)<sup>11</sup>.
24. This gives a consistent measure for comparison of articulation years. Table 4 shows the figures for direct comparison of articulation across the 2014-15 to 2017-18 period based on students moving on to HEIs from college within the

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<sup>11</sup> On average 95.5% of all AS and all AP occurs within three years – see [Table 16](#).

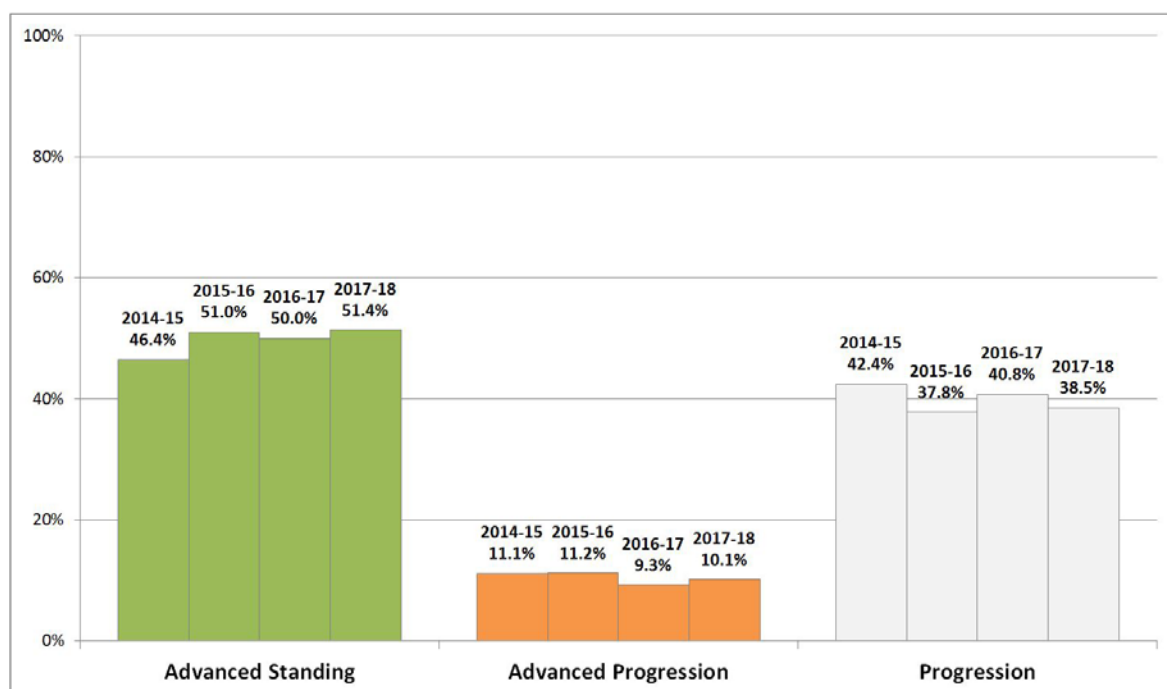
previous three years.<sup>12</sup>

Table 4: Articulation 2014-15 to 2017-18 (Scottish-domiciled students articulating within three years of HNC/HND completion)

	Advanced Standing	Advanced Progression	Progression	Total
<b>2014-15</b>	3,539	847	3,233	7,619
<b>2015-16</b>	3,869	846	2,867	7,582
<b>2016-17</b>	3,722	690	3,035	7,447
<b>2017-18</b>	4,021	791	3,014	7,826

25. The Advanced Standing column in this table shows the values relevant to *National Outcome Agreement Measure 7* which looks to “increase the number and proportion of Scottish-domiciled learners articulating from college to degree-level courses with Advanced Standing”. 2017-18 has the highest numbers of Advanced Standing in the past four years at 4,021.
26. Figure 1 shows the figures as percentages across each articulation year, giving a better understanding of the relative proportions of the levels of articulation (Advanced Standing, Advanced Progression and Progression).

Figure 1: HNC/HND Articulation 2014-15 to 2017-18 (Scottish-domiciled students articulating within three years of HNC/HND completion)



<sup>12</sup> It should be noted that under articulation categorisations there cannot be any Advanced Progression for students who articulate to an HEI after completing an HNC. This explains why most articulating students are coded as Advanced Standing or Progression within Table 4 and other tables throughout the report.

27. The above shows articulation with Advanced Standing is at its highest in the four years at 51.4%, a 5.0 percentage point (pp) increase from 2014-15 (46.4%). We observe a reduction in the proportions with Advanced Progression from 11.1% to 10.1% over the period and a larger reduction in Progression from 42.4% in 2014-15 to 38.5% in 2017-18.
28. The recently-published *Higher Education Students and Qualifiers at Scottish Institutions 2017-18* shows Scottish-domiciled entrants to first degrees in Scottish Universities<sup>13</sup>. Table 5 below shows the proportion of these students coming through Scotland's colleges who studied HNC or HND, with greater than one in four of Scottish-domiciled first degree entrants coming to university through this route in each of the academic years.

Table 5: Proportions of Scottish-domiciled First Degree Entrants via College Routes 2014-15 to 2017-18 (overall)

Academic Year	Scottish FD entrants to Scottish HEIs	From Scottish Colleges	% via College Route
2014-15	34,480	8,882	25.8%
2015-16	35,395	8,995	25.4%
2016-17	35,835	9,063	25.3%
2017-18	37,410	9,763	26.1%

29. Table 6 shows articulation by qualification level held on entry (HNC or HND). Although there is no clear trend over the period, there is an increase in Advanced Standing from 2014-15 compared to 2017-18 across both qualifications.

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<sup>13</sup> <http://www.sfc.ac.uk/nmsruntime/saveasdialog.aspx?IID=19371&SID=11753> (Figure 3) [XLS]

Table 6: HNC/HND Articulation 2014-15 to 2017-18 (Scottish-domiciled students articulating within three years of HNC/HND completion)

	Advanced Standing	Advanced Progression	Progression	Total
<b>HNC</b>				
<b>2014-15</b>	910	-	2,264	3,174
<b>2015-16</b>	1,049	-	2,221	3,270
<b>2016-17</b>	1,034	-	2,120	3,154
<b>2017-18</b>	1,146	-	2,212	3,358
<b>HND</b>				
<b>2014-15</b>	2,629	847	969	4,445
<b>2015-16</b>	2,820	846	646	4,312
<b>2016-17</b>	2,688	690	915	4,293
<b>2017-18</b>	2,875	791	802	4,468

30. Figures 2 and 3 below show the same groups by the proportion entering with Advanced Standing, Advanced Progression and Progression.

Figure 2: HNC Articulation 2014-15 to 2017-18 (Scottish-domiciled students articulating within three years of HNC/HND completion)

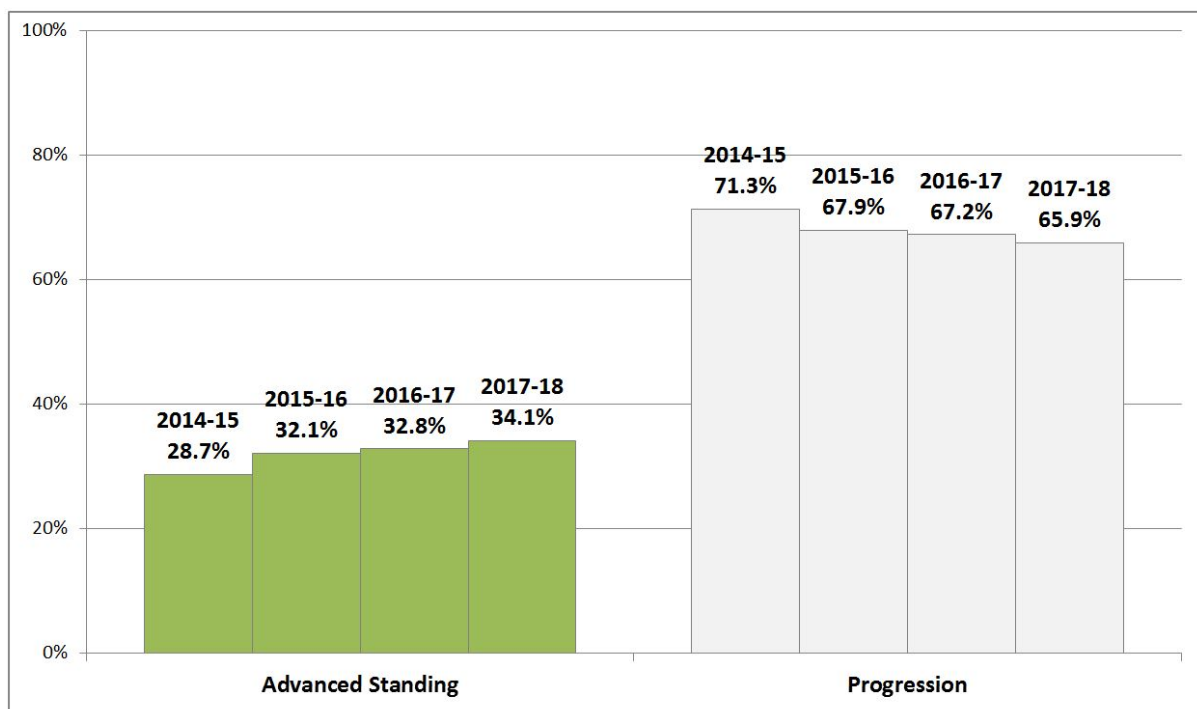
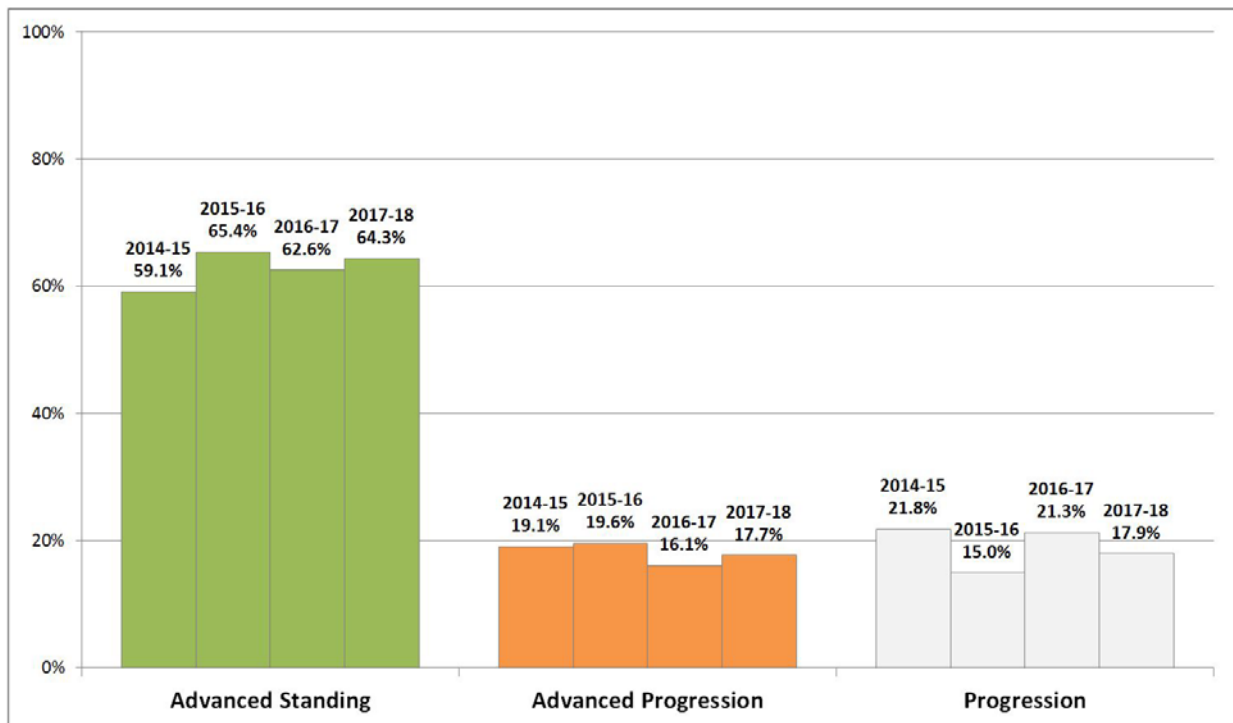


Figure 3: HND Articulation 2014-15 to 2017-18 (Scottish-domiciled students articulating within three years of HNC/HND completion)



31. Figures 2 and 3 highlight some interesting differences across the HNC and HND groups. In 2017-18 only 34.1% of students articulating received credit for prior learning after completing an HNC (Figure 2), whereas 82.1% of those who articulated after completing an HND received at least some credit for prior learning, with 64.3% receiving full standing (Figure 3).



## Subject pathways

Note: Figures concerning subject analysis for articulation use combined figures from all articulation years unless otherwise stated; subject discussion is also not limited to Scottish-domiciled students only since the concern here is to observe the strongest subject pathways.

### College to University

32. The relationship between college and university subjects is key to observing routes of articulation. A great deal of work has therefore been put into establishing articulation pathways. It is not possible in this publication to delve too deeply into this area since an analysis of this could be a publication in itself. Here we provide the college source subjects (HE subject group) with the greatest numbers of Advanced Standing.
33. Tables are prioritised by the greatest numbers of Advanced Standing and figures show only Advanced Standing and Advanced Progression since it is the active routes we are concerned with<sup>14</sup>.

Table 7: Top College source subjects for Advanced Standing (combining all articulation years from 2014-15 to 2017-18)

College HE Subject	Advanced Standing	Advanced Progression
Accountancy/Accounting	1,189	145
Sports and Hobbies	988	299
Business Studies	910	139
Applied Social Science/Studies	854	256
Computer Studies	581	173
Management	565	36
Mechanical Engineering	511	62
Music	471	81
Computer Science	424	112
Administrative Management	415	70

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<sup>14</sup> With subject analysis, we need to be aware of the relative size of these subjects groups.

34. Table 8 shows the top five university destination subjects for the first five college subjects from Table 7 and highlights the array of pathways students follow from college to university.

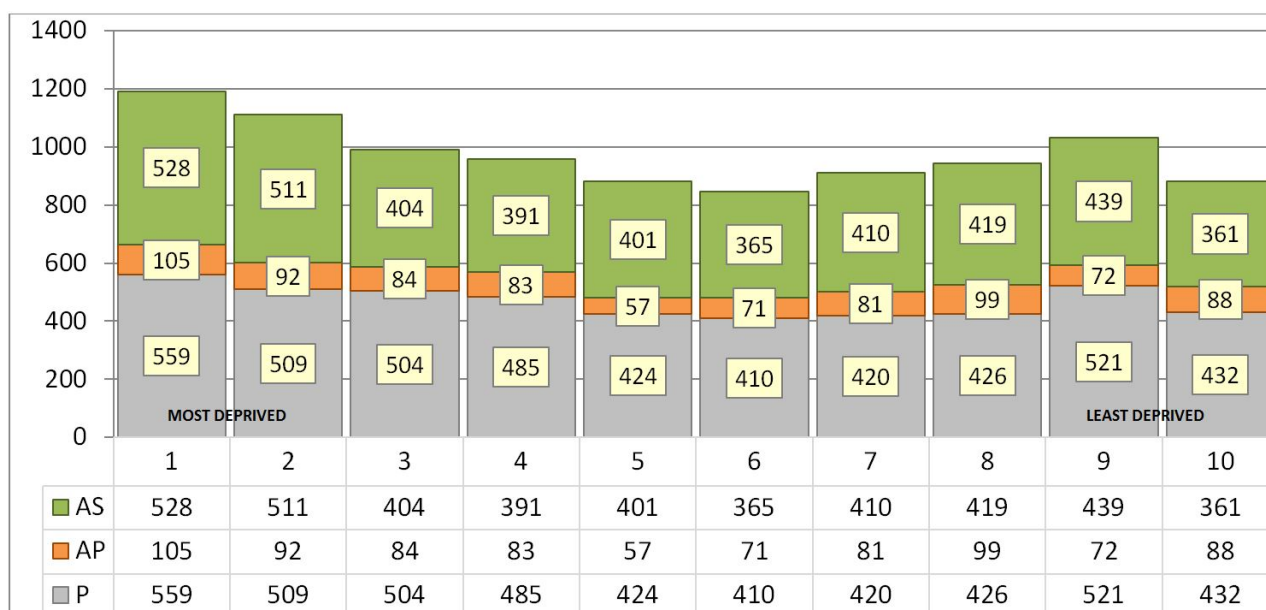
Table 8: Destination Subjects for College subjects with highest Advanced Standing counts (combining all articulation years from 2014-15 to 2017-18)

<b>College HE Subject (green) to University Subject (white)</b>	<b>Advanced Standing</b>	<b>Advanced Progression</b>
<b>Accountancy/Accounting</b>	<b>1,189</b>	<b>145</b>
Accounting	1,115	122
Finance	27	11
Combined	25	-
Business studies	15	-
Management studies	-	0
<b>Sports and Hobbies</b>	<b>988</b>	<b>299</b>
Sport & exercise science	852	264
Hospitality, leisure, sport, tourism & transport	99	15
Anatomy, physiology & pathology	18	7
Combined	10	0
Nutrition	-	-
<b>Business Studies</b>	<b>910</b>	<b>139</b>
Business studies	497	108
Management studies	170	9
Hospitality, leisure, sport, tourism & transport	79	5
Human resource management	48	8
Marketing	41	-
<b>Applied Social Science/Studies</b>	<b>854</b>	<b>256</b>
Sociology	484	53
Psychology	231	94
Politics	40	36
Law by topic	26	13
Anthropology	25	5
<b>Computer Studies</b>	<b>581</b>	<b>173</b>
Computer science	403	105
Information systems	83	26
Software engineering	72	12
Architecture	7	-
Combined	5	-

## Widening Access: Deprivation (SIMD)

35. A key aspect of articulation is to widen access to education for those from the most-deprived SIMD areas<sup>15</sup>. Figure 4 shows the SIMD distribution for Scottish-domiciled articulating students in 2017-18. The largest numbers of articulating students come from the two most deprived SIMD deciles. We also see in these two deciles the highest volumes of students attaining Advanced Standing (528 and 511 respectively). The proportions of Advanced Standing across the remaining deciles is very similar although it ranges from 361 (decile 10) to 439 (decile 9) – it is interesting to note the large number of articulating students from decile 9, which is higher than all but the two most-deprived deciles.

Figure 4 – Articulation by SIMD Decile 2017-18 (overall)



36. It is also interesting to examine the proportion of Scottish-domiciled Full-time first degree entrants from the 20% most deprived areas<sup>16</sup> and the corresponding proportion of this group who have come via the college route. Table 9 shows that over 40% of students in the most deprived quintile progress to university through the college HNC/HND pathway.<sup>17</sup>

<sup>15</sup> [SFC/ST/06/2018 Report on Widening Access 2016-17.pdf \(Section 4\)](#)

<sup>16</sup> [SFC/ST/06/2018.aspx Table 1 - updated to also include figures for 2017-18](#)

<sup>17</sup> Note, the National Articulation Base utilises SIMD 2016 where the unweighted SIMD 2012 is used in the Report on Widening Access

Table 9: Scottish-domiciled Full-time First Degree Entrants from the 20% Most Deprived Areas and Proportions from Articulation Routes 2014-15 to 2017-18

<b>Academic Year</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Total MD20	3,965	4,015	3,965	4,650
Articulation MD20	1,571	1,701	1,676	1,946
% from Articulation	39.6%	42.4%	42.3%	41.8%

## Figures for University and College articulation 2017-18

37. As can be seen from Tables 10 and 11, levels of articulation vary across both colleges and universities.

Table 10 Movement from College 2017-18 (overall)

College	Advanced Standing	Advanced Progression	Progression	Total
Argyll College (UHI)	-	0	5	<b>5</b>
Ayrshire College	374	-	384	<b>758</b>
Borders College	19	-	38	<b>57</b>
City of Glasgow College	831	197	712	<b>1,740</b>
Dumfries and Galloway College	50	-	78	<b>128</b>
Dundee and Angus College	287	65	357	<b>709</b>
Edinburgh College	446	111	477	<b>1,034</b>
Fife College	155	40	231	<b>426</b>
Forth Valley College	89	34	156	<b>279</b>
Glasgow Clyde College	392	96	398	<b>886</b>
Glasgow Kelvin College	205	51	231	<b>487</b>
Inverness College (UHI)	24	0	52	<b>76</b>
Lewis Castle College (UHI)	-	0	7	<b>7</b>
Moray College (UHI)	26	0	60	<b>86</b>
New College Lanarkshire	243	44	366	<b>653</b>
Newbattle Abbey College	-	0	17	<b>17</b>
North East Scotland College	540	110	314	<b>964</b>
North Highland College (UHI)	-	0	15	<b>15</b>
Orkney College (UHI)	-	0	-	<b>0</b>
Perth College (UHI)	24	0	106	<b>130</b>
Scotland's Rural College (SRUC)	20	-	50	<b>70</b>
Shetland College (UHI)	-	0	10	<b>10</b>
South Lanarkshire College	104	11	98	<b>213</b>
West College Scotland	287	59	348	<b>694</b>
West Highland College (UHI)	-	0	-	<b>0</b>
West Lothian College	103	-	175	<b>278</b>
UHI college (unknown)	-	0	7	<b>7</b>
<b>Grand Total</b>	<b>4,233</b>	<b>832</b>	<b>4,698</b>	<b>9,763</b>

Table 11 Movement to University 2017-18 (overall)

University	Advanced Standing	Advanced Progression	Progression [including Flexible OU Progression]	Total
Aberdeen, The University of	33	62	157	<b>252</b>
Abertay Dundee, The University of	304	82	145	<b>531</b>
Dundee, The University of	70	61	326	<b>457</b>
Edinburgh Napier University	538	76	215	<b>829</b>
Edinburgh, The University of	20	32	72	<b>124</b>
Glasgow Caledonian University	990	49	707	<b>1,746</b>
Glasgow School of Art	22	21	31	<b>74</b>
Glasgow, The University of	13	0	224	<b>237</b>
Heriot-Watt University	117	55	162	<b>334</b>
Open University, The* (see box below)	0	0	518*	<b>518</b>
Queen Margaret University	122	24	136	<b>282</b>
Royal Conservatoire of Scotland	0	0	21	<b>21</b>
Scotland's Rural College (SRUC)	35	0	9	<b>44</b>
St Andrew's, The University of	-	0	14	<b>14</b>
Stirling, The University of	37	21	418	<b>476</b>
Strathclyde, The University of	27	44	420	<b>491</b>
The Robert Gordon University	561	72	265	<b>898</b>
University of the Highlands and Islands	67	18	75	<b>160</b>
West of Scotland, The University of the	1,275	215	783	<b>2,273</b>
Non-Scottish University	-	0	0	<b>0</b>
<b>Grand Total</b>	<b>4,233</b>	<b>832</b>	<b>4,698</b>	<b>9,763</b>

38. Note: The Open University (OU) offers a model of flexible part-time higher education where students can register for a degree at the outset of their studies although they are not required to do so. Instead, they can start by studying individual modules and, as confidence builds, can link these to a degree in later years. Similarly, students can work towards an intermediate qualification - such as a DipHE - before registering for a degree. A stated initial aim of a degree in OU study is not a prerequisite and as such many OU students do not appear in the NAD since this is a driving parameter of articulation.
39. Also, as the NAD only utilises the last ten years of FES data, there is a limitation on OU numbers since OU students may transfer credit from an HN award towards an OU qualification at any point up to a maximum of 16 years after the date of their HN award. Articulating students can also apply for credit transfer at any time during their degree. We are working with the OU to improve the representation of OU students and will endeavour to implement this in the National Articulation Database and publication for 2018-19.
40. In this publication, Flexible OU Progression figures will include unclassified students who will be articulating with full (AS) and partial (AP) academic credit as well as those who are progressing.

## Groups of special interest and protected characteristics

### Gender

41. Females, combining all articulation years, account for 55.4% of students (20,350), with males making up 44.5% (16,347). Other genders number fewer than five. The representation of females with full Advanced Standing is 49.8% of the numbers with full academic credit compared with 50.2% for males. This may be largely a consequence of the subjects studied and the gender domination within such subjects.
42. For example (and using overall figures combining all years), female-dominated *Nursing Related Studies* has females outnumbering males by greater than 14:1 and articulation does not occur except in defined programmes such as the *HNC Care and Administrative Practice (enhanced degree route)*. But numbers in such routes are small, the NAD showing entry to nursing having 30 (7.8%) with Advanced Standing compared with 356 (92.2%) with Progression. Such courses reduce the representation of females in overall levels of Advanced Standing.
43. By contrast, in the male-dominated *Information Technology* males outnumber females 4:1 and the articulation levels favour Advanced Standing: 372 (66.5%) with Advanced Standing, 78 (13.9%) with Advanced Progression and 109 (19.5%) Progressing. The effect of such subjects is to bolster male proportions of Advanced Standing and contribute to the proportional disparity we see between populations and Advanced Standing.
44. Tables 12 and 13 show the 10 university subjects with the greatest numbers of Advanced Standing for males and females combined for all years. The tables show the difference in study directions with females favouring *Business studies* while males prefer *Computer Science*. We also see *Nursing* and *Social Work* in the top five for females compared to *Building* and *Electronic & Electrical Engineering* in the top five for males. The subject balance is quite different for the different genders.

Table 12: Female HEI subjects with highest Advanced Standing (combining all years 2014-15 to 2017-18)

University Subject	Advanced Standing	Advanced Progression
Business studies	946	187
Hospitality, leisure, sport, tourism & transport	824	36
Accounting	737	62
Nursing	616	8
Social work	510	20
Sociology	439	46
Sport & exercise science	375	94
Design studies	354	297
Management studies	275	12
Media studies	236	18

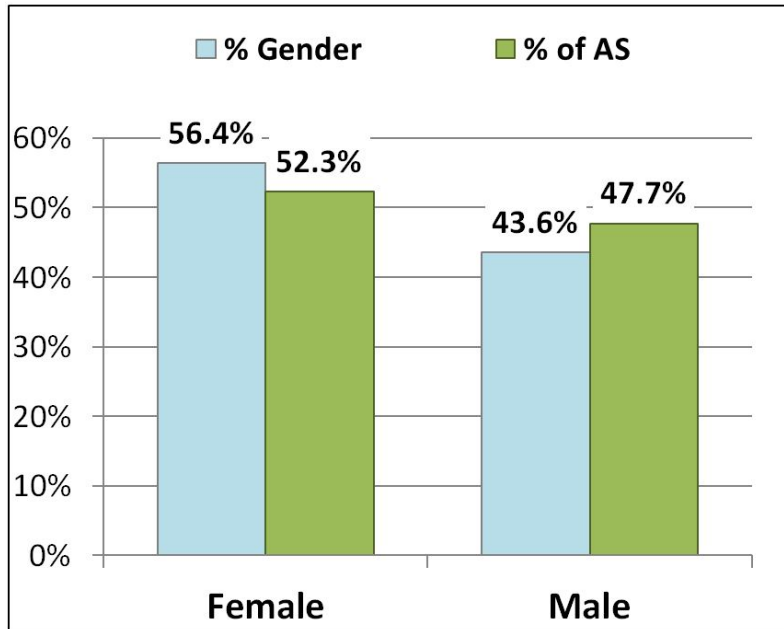
Table 13: Male HEI subjects with highest Advanced Standing (combining all years 2014-15 to 2017-18)

University Subject	Advanced Standing	Advanced Progression
Computer science	1,302	393
Sport & exercise science	668	190
Business studies	559	142
Building	525	32
Electronic & electrical engineering	508	37
Accounting	487	73
Mechanical engineering	422	68
General engineering	349	89
Software engineering	292	31
Information systems	269	87



45. Figure 5 shows gender overall proportions for males and females and the proportions of Advanced Standing for each for 2017-18.

Figure 5: 2017-18 Gender Distribution – population versus Advanced Standing (Scottish-domiciled students articulating within three years of HNC/HND completion)



#### Other protected characteristics and groups of special interest

46. Table 14 provides a reference table of national numbers of students from *Black and Minority Ethnic groups*, those flagged for *disability, deaf/hearing impairment, blind/visually impaired, carers and care-experienced*. This table is included to reflect the representation of those flagged in the database, their representation in the overall populations each year and their representation of those who get Advanced Standing. The coloured arrow indicates if their proportion of Advanced Standing is greater (green), less (red) or the same (blue) as their representation in the population. A series of blue arrows would indicate complete equality and parity where the identified group was just as likely to gain Advanced Standing as someone without the flagged characteristic.

Table 14: Protected Characteristics Reference Table 2014-15 to 2017-18 (overall)

	Subgroup Total	Subgroup Advanced Standing	Total Population	Total AS	Subgroup % of Total Population	Subgroup % of Advanced Standing	
<b>BME</b>							
2014-15	584	293	8,882	3,674	6.6%	8.0%	▲
2015-16	629	310	8,995	4,061	7.0%	7.6%	▲
2016-17	631	332	9,063	3,895	7.0%	8.5%	▲
2017-18	759	388	9,763	4,233	7.8%	9.2%	▲
<b>Disability Flagged</b>							
2014-15	1,250	474	8,882	3,674	14.1%	12.9%	▼
2015-16	1,331	523	8,995	4,061	14.8%	12.9%	▼
2016-17	1,413	548	9,063	3,895	15.6%	14.1%	▼
2017-18	1,718	647	9,763	4,233	17.6%	15.3%	▼
<b>Deaf/Partial Hearing</b>							
2014-15	33	9	8,882	3,674	0.4%	0.2%	▼
2015-16	36	18	8,995	4,061	0.4%	0.4%	▶
2016-17	34	15	9,063	3,895	0.4%	0.4%	▶
2017-18	48	19	9,763	4,233	0.5%	0.4%	▼
<b>Blind/Partially Sighted</b>							
2014-15	25	11	8,882	3,674	0.3%	0.3%	▶
2015-16	25	14	8,995	4,061	0.3%	0.3%	▶
2016-17	22	13	9,063	3,895	0.2%	0.3%	▲
2017-18	42	19	9,763	4,233	0.4%	0.4%	▶
<b>Carer</b>							
2014-15	7	-	8,882	3,674	0.08%	0.08%	▶
2015-16	5	0	8,995	4,061	0.06%	0.00%	▼
2016-17	29	9	9,063	3,895	0.32%	0.23%	▼
2017-18	47	16	9,763	4,233	0.48%	0.38%	▼
<b>Care Experienced</b>							
2014-15	70	16	8,882	3,674	0.8%	0.4%	▼
2015-16	61	25	8,995	4,061	0.7%	0.6%	▼
2016-17	88	28	9,063	3,895	1.0%	0.7%	▼
2017-18	128	46	9,763	4,233	1.3%	1.1%	▼

## **Annex 1: Methodology, data definitions and quality information**

### **Revised National Articulation Database development methodology**

47. As stated, this articulation report is concerned with establishing where HNC/HND students go to university and which year of study they arrive into. This is carried out in the following manner.
48. In the first instance, records are prepared for matching. This involves selecting the best and most appropriate record for each individual in Scotland's Further Education Statistics (FES), in the UK's Higher Education Statistics from HESA and from the Scottish Qualification Authority (SQA) database.
49. The FES record is first matched with the SQA record to pick up certification and make any modifications to the level of qualification of the student as necessary, e.g. a student who is coded as HND in FES but has a qualification level of HNC in SQA would become an HNC-level student for HESA matching purposes.
50. The combined FES/SQA records are then matched to the HESA records and a series of checks are carried out to identify true matches that relate to the same student.
51. Compilation brings all matches together in the dataset before establishing which year of articulation is valid for each individual student. For the majority, this is the first time they articulate to an institution, but where an individual is found articulating to two institutions in consecutive years, both records of articulation are kept, since monitoring "false starts" is also of interest to better manage future articulation pathways.
52. Once a single record for the appropriate articulation year is established for each student the data is checked to ensure there are no unexpected multiple occurrences of the HESA Student Identifier or the Scottish Candidate number so that analyses of articulation by student can be undertaken.
53. Analyses of articulation use the level of articulation based on the highest assumed HN qualification and the year of programme for the first year of degree study at university. So for example, if the system finds an HND student whose first year of study at university is into year two of a programme, they would be assigned Advanced Progression and the relevant flagging assigned for counting.

## **Quality information: QA of the revised NAD**

54. Extensive QA of our articulation analysis has been carried out to obtain an accurate and comprehensive set of records on articulation:
  - a. The original code was audited internally for sense and accuracy.
  - b. Data was sent to universities to check accuracy of articulation assignment and to establish if there were any missing students. The universities returned datasets with queries regarding articulation levels as well as indications of students they felt should be included / excluded but were not.
  - c. Articulation levels that were queried were re-assessed and changed if necessary, while the “missing” students queried by institutions were cross-referenced against:
    - i. FES and SQA datasets.
    - ii. Through *all* non-HNC/HND enrolments in FES back to 2008-09.
55. In doing this, we established comprehensively where every queried student sat within our articulation findings and established every possible match between HESA data for the most current four years and FES for the last decade. The process allowed us to establish the accuracy and efficiency of the system since we can state that inclusion in the figures published here reflect only the numbers which meet the requirements of correctly-coded data entries at both university and college.
56. We will be working closely with the sectors to ensure improved data accuracy to make articulation results comprehensive in reflecting all articulation programmes going forward. We will also continue to refine matching process to see if any further gains can be made.

## **Limitations on accuracy and other considerations**

57. Although every effort has been made to derive a complete picture of all articulation between Scotland’s colleges and universities, there are omissions from counts because the data simply isn’t robust enough for inclusion.
58. There are also some notable issues in the articulation results worth mentioning and which add limitations to the articulation figures. The issue comes from the fact that students may be offered Advanced Standing or Advanced Progression by a university but may choose to start at year one (Progression). As there is no field in the HESA data to show that articulation was offered and refused, potential articulation at Advanced Standing and Advanced Progression may be slightly higher than the reported figures.

59. There is also the issue that we do not know from the HESA data whether the highest qualification on entry – which HESA collect – is the qualification used for entry. This can make excluding inappropriate matches more problematic than it could be.
60. There is also no indication in the data to flag where things other than the HNC/HND are in play for articulation purposes, such as relevant work experience or other training beyond the scope of the FES data.

Example, an individual has worked for eight years and enters university with Advanced Standing into year three. Their qualification on entry shows they have an HND as their highest qualification on entry but their work experience may actually be the reason for the articulation level.

61. These issues with the qualification on entry and possible work experience/training influencing articulation have been central to the decision to use a three year trailing period for the articulation measurement.
62. All of the above factors should be considered when evaluating the articulation figures as we work towards solutions to resolve these issues.

## Data definitions

**Scottish-domiciled:** Any student recorded in the HESA Student return as being permanently domiciled in Scotland prior to starting their course.

**Articulation pathways:** Articulation pathways are data-generated relationships between college HE Subject groupings and university subjects. Our articulation system looks for examples where a combination has yielded an instance of AS or AP and then flags all instances of this combination across the database. This allows accurate counting of those where potential articulation could occur driven by data showing prior learning accreditation, and allows us to identify students where the learner has changed direction in studies on the non-pathways.

**Trailing period:** The amount of time between completion of the HNC/HND course and the first year of university study.

**Measurable figures:** Articulation is included in the analyses if it meets the following criteria:

- Scottish-domiciled student.
- On an Articulation Pathway.
- Three-year maximum between HN completion and attending university.

**Overall figures:** Articulation for all Scottish-domiciled students on both articulation pathways and non-pathways.

Table 15 – Student numbers where HNC/HND was followed by further non-HN study before articulation (combining all articulation years)<sup>18</sup>

HEI	AS not admissable for NAD
Aberdeen, The University of	-
Abertay Dundee, The University of	52
Dundee, The University of	8
Edinburgh Napier University	29
Edinburgh, The University of	-
Glasgow Caledonian University	39
Glasgow School of Art	-
Glasgow, The University of	9
Heriot-Watt University	9
Queen Margaret University, Edinburgh	14
Royal Conservatoire of Scotland	-
Scotland's Rural College (SRUC)	14
Stirling, The University of	29
Strathclyde, The University of	200
The Robert Gordon University	18
University of the Highlands and Islands	19
West of Scotland, The University of the	93

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<sup>18</sup> See [paragraph 15](#).

Table 16 – Breakdown of trailing years for articulation years 2014-15 to 2017-18<sup>19</sup>

<b>2017-18</b>	<b>AS</b> <b>4,233</b>	<b>AP</b> <b>832</b>	<b>AS+AP</b> <b>5,065</b>	<b>% of Total</b> <b>AS+AP</b>	<b>Running %</b>
2016-17	3,627	703	4,330	85.5%	85.5%
2015-16	280	56	336	6.6%	92.1%
2014-15	114	32	146	2.9%	95.0%
2013-14	76	13	89	1.8%	96.8%
2012-13	45	12	57	1.1%	97.9%
2011-12	29	5	34	0.7%	98.6%
2010-11	32	6	38	0.8%	99.3%
2009-10	10	-	12	0.2%	99.5%
2008-09	17	-	20	0.4%	99.9%
2007-08	-	0	-	0.1%	100%

<b>2016-17</b>	<b>AS</b> <b>3,895</b>	<b>AP</b> <b>723</b>	<b>AS+AP</b> <b>4,618</b>	<b>% of Total</b> <b>AS+AP</b>	<b>Running %</b>
2015-16	3,323	592	3,915	84.8%	84.8%
2014-15	308	71	379	8.2%	93.0%
2013-14	91	27	118	2.6%	95.5%
2012-13	58	10	68	1.5%	97.0%
2011-12	49	12	61	1.3%	98.3%
2010-11	24	5	29	0.6%	99.0%
2009-10	23	-	26	0.6%	99.5%
2008-09	14	-	17	0.4%	99.9%
2007-08	5	0	5	0.1%	100%

<b>2015-16</b>	<b>AS</b> <b>4,061</b>	<b>AP</b> <b>887</b>	<b>AS+AP</b> <b>4,948</b>	<b>% of Total</b> <b>AS+AP</b>	<b>Running %</b>
2014-15	3,482	732	4,214	85.2%	85.2%
2013-14	274	79	353	7.1%	92.3%
2012-13	113	35	148	3.0%	95.3%
2011-12	82	12	94	1.9%	97.2%
2010-11	46	16	62	1.3%	98.4%
2009-10	34	8	42	0.8%	99.3%
2008-09	26	5	31	0.6%	99.9%
2007-08	-	0	-	0.1%	100%

<b>2014-15</b>	<b>AS</b> <b>3,674</b>	<b>AP</b> <b>878</b>	<b>AS+AP</b> <b>4,552</b>	<b>% of Total</b> <b>AS+AP</b>	<b>Running %</b>
2013-14	3,157	749	3,906	85.8%	85.8%
2012-13	291	68	359	7.9%	93.7%
2011-12	91	30	121	2.7%	96.4%
2010-11	56	20	76	1.7%	98.0%
2009-10	39	7	46	1.0%	99.0%
2008-09	39	-	42	0.9%	100%
2007-08	-	-	-	0.0%	100%

<sup>19</sup> See [paragraph 19](#).