



ASSOCIATION  
OF COLLEGES

# Forecasting 16-to-18 education growth to 2030

August 2021

## Foreword – David Hughes, Chief Executive, AoC

This report fills an important gap which we have been highlighting for some years now but which comes to a head now that the spending review is underway. Our message is simply that it is vital that Treasury and the Department for Education take into account the growing numbers of 16-to-18-year-olds in England who will need to be funded in colleges, schools and apprenticeships.

After reaching a low point in 2019, the cohort of young people is now rising by around 2% a year, so even with a stable participation rate, the costs of education will rise significantly. The impact of the pandemic on the labour market means it is likely that participation in colleges will rise because jobs and apprenticeships are harder to come by.

We estimate that there will be 90,000 more young people in education by 2024-5. That requires £500million of extra funding even at the inadequate funding rates colleges and schools have to work with.

All of this happens in a system with one-year budgets and where colleges are supposed to take on the financial costs of meeting extra demand one year ahead of being fully funded for them. Last academic year some additional funding was found to support the extra students in colleges, but it is very different to the situation in universities where every single extra student is fully funded in the year that a student is recruited. That is not fair on those students, nor does it support colleges to plan for and develop the capacity for the growth in numbers.

So we are publishing this report to ensure that DfE and HM Treasury are setting that increased funding as the baseline for the spending review and to be built into college budgets going forwards. After enormous disruptions to their education, young people deserve to have properly funded college places available to them.

We have three suggestions for action:

1. DfE should annually publish student number projections covering 16, 17 and 18 year olds.

2. HM Treasury should provide a longer-term revenue and capital budget for 16-to-18 education that anticipates demographic trends. Over the spending review period, demographics alone imply an additional 90,000 extra young people in colleges by 2024-5 at a cost of £0.5 billion when fully funded.
3. DfE should adjust its funding formula to provide an automatic guarantee of additional funding for extra 16-to-18 year olds recruited each year.

David Hughes  
August 2021

If you have any questions about this paper, please contact [Teresa.Frith@aoc.co.uk](mailto:Teresa.Frith@aoc.co.uk) or [David.Corke@aoc.co.uk](mailto:David.Corke@aoc.co.uk).

# Forecasting 16-to-18 education growth to 2030

## The need for 16-to-18 student number projections

1. The Department for Education publishes annual projections of numbers in state-funded education but these figures stop at age 15 (covering those in Year 11 / their GCSE year). DfE does not publish projections for the number of 16-to-18-year-olds even though the participation age (in law) now runs to the 18<sup>th</sup> birthday and despite the fact that DfE provides funding for more than a million people in this age group in education or apprenticeships. The gap in official data is a serious omission particularly as it has long been obvious that numbers over the age of 16 would rise in the 2020s but not necessarily clear when or how much. This is why forecasts are carried out.
2. AoC asked the DfE statistical enquiry line a few years ago why the pupil number projections stopped at 15 and received this answer:

*“The base for the actual school population is the school census. Those aged over 16 who are in education can be in a range of settings, including FE/HE colleges whose population are recorded elsewhere. This is beyond the remit of these projections, which are principally produced to get a forward look at the size of the population we are likely to see in our schools in future years.*

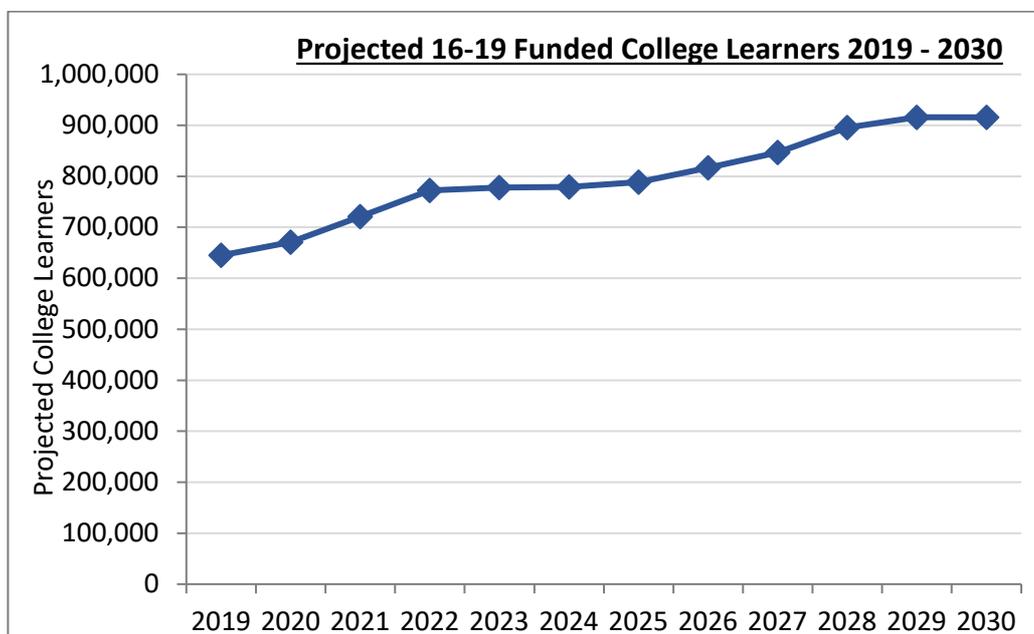
*There are many factors which can affect the number of children who choose to a) continue post 16 in a formal education setting and b) do that within a school. The methodologies used for this projection are relatively simple, which could not take the potential variation into account, and require a way of balancing the books between the school types which does not work when enrolment is entirely voluntary”*

3. AoC doesn't have the statistical strength in depth of the DfE but we know a lot about colleges and a number of things worry us about the gap in official forecasts:
  - Revenue funding: For the last two years (2020-1, 2021-2), HM Treasury has given DfE a one-year budget for 16-to-18 education, including £285 million for extra student numbers. There is a risk that inadequate data will result in bad planning.

- Capital funding: It has been obvious throughout the 2010s that the rise in the birth rate after 2002 would result in rising 16-to-18 numbers in the 2020s but 2021-2 is the first year in which there is a specific capital fund for extra 16-to-18 numbers. There is a risk that inadequate data will result in bad planning.
  - 16-to-18 funding formula: ESFA's 16-to-18 funding formula works on a one-year lag in terms of student numbers. There is a mechanism to fund exceptional in-year growth but this is not published in advance and is only used if DfE has funds available. In 2020, DfE paid £10 million in exceptional in-year growth in spring 2020 and £61 million in spring 2021. DfE will have used the extra funds allocated by the Treasury to cover these numbers but it took until February 2021 to confirm to colleges that the students they recruited in September 2020 would be partially funded.
  - Development of technical education: There are plenty of reasons to be optimistic about DfE's carefully implemented T level growth plan but funding constraints and uncertainties will make colleges cautious particularly given the high-stakes accountability system within which they operate.
  - Provision for disadvantaged young people: There are many incentives in the 16-to-18 education system for colleges and schools to prioritise better qualified students taking courses at Level 3. The majority of school sixth forms require GCSEs at grade 4, 5, 6 or even 7 as an entry requirement which sometimes leaves colleges as the sole provider for the 30% of young people who don't reach that level. There is a risk that growing demand for places will squeeze out disadvantaged young people. This is not an outcome that college or school leaders will consciously aim for but could be a by-product of a system designed without adequate data.
4. This paper is AoC's first start at filling a gap. We know that DfE officials look at demographics but there are no official statistics to inform the public debate. We worked with RCU to produce a projection model to consider the impact of demographic change up to 2030 on 16 – 18-year-olds student numbers within further education and sixth form colleges. We supplemented these numbers with information on other external changes and how these might also affect student choice over the decade.

## Number of 16 to 18 students to 2030

5. In 2019, according to Office of National Statistics demographic data, the 16-year-old population was 620,054 – a low point. This rose to 641,095 in 2020 and 654,297 in 2021. Incremental increases (approximately 2% per year) will continue through to 2028 when the population will peak at 769,208.
6. Using college Individual Learner Record data that contains information about student home address and ONS district level population forecasts, RCU forecast the impact of this population growth on college enrolments using an assumption that a consistent percentage will participate in further education.
7. Although many young people start two year courses at 16 and stay the course, others don't and there is considerable movement at ages 17 and 18. In 2020, the number of 17 year olds in colleges was 91% of the 16 year old population in colleges and the number of 18 year olds was 51%. Applying these percentages at college level to the data, we produce this forecast for the numbers in 16-to-18 education in colleges. Demographics alone imply an additional 90,000 extra young people in colleges by 2024-5 compared to 2020-1 and a further 100,000 in the second half of the 2020s (assuming some change in market share).

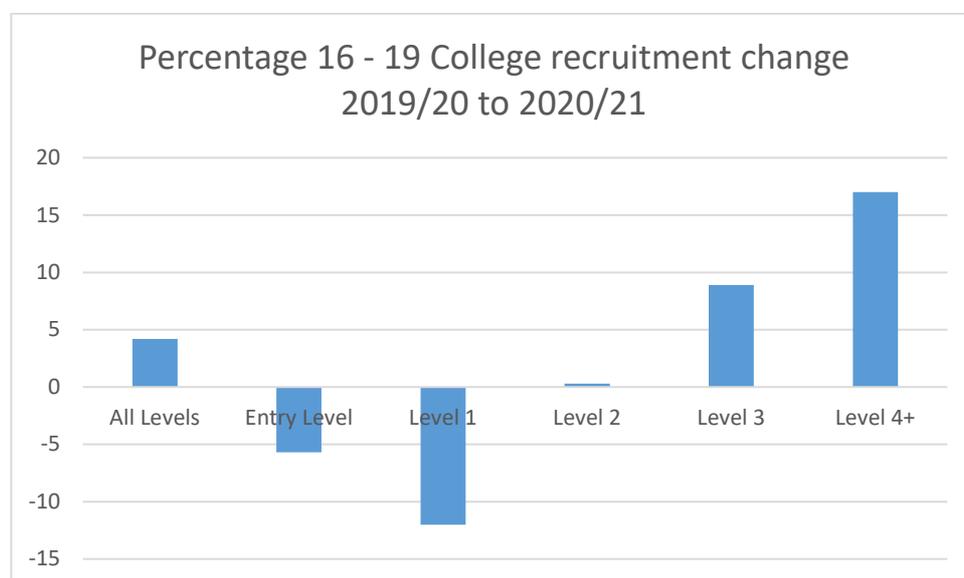


8. College apprenticeship numbers are comparatively small, and numbers of 16-year-old starters shrunk significantly between 2019 and 2020 from 4% of the population to 2%. Interestingly colleges train more 17-year-olds in

apprenticeships, with 34,108 17 year olds on college apprenticeships in 2020 against 24,938 16-year-olds in 2019.

## Changes in level of study

- Demographic shift is not the only reason to anticipate changes in participation rates. There are further factors that could well influence young people's choices over the coming years. Some trends, such as the reduction in the number of young people accessing apprenticeships, are already being seen. Other factors are less predictable, particularly those that are related to government influence on choice, including policies to develop T levels, rationalise Level 3 and 2 qualifications and change higher education.



- There will be further changes in 2021-2 and 2021-2 because of the cancellation of GCSE exams and their replacement by Centre Assessed Grades (in summer 2020) and Teacher Assessed Grades (in summer 2021). Evidence from in-year 2021-2 data shows a further (25%) increase in the number of learners studying at Level 3. We may see these learners move away from study at this level towards other programmes that reflect their actual level of learning.

## Changes relating to the economic environment

11. External factors will also impact on learner numbers. Changes in the economic and job market; automation and the growth of green and health jobs will also influence learner decisions and subject choices. The pandemic has produced profound changes in the economy, with a significant amount of negative impact on young people as the number of entry level jobs in hospitality and retail sharply reduced resulting in significant rises in unemployment in the 16 – 18 population - around 8% (16 – 24). It is not yet clear how effective the 2021 'bounce back' will be, particularly in retail where the pandemic has also accelerated a general shift to on-line retail which is less likely to see a return to pre-pandemic footfall levels. It is to be hoped that 16 – 18-year-olds who would have previously sought employment will now engage with education and training rather than become NEET.
12. One likely scenario is that colleges could see an additional 4 – 8% increase in starts due to economic shift. Alternative entry level employment may become available over time, so a two-year increase is predicted to 2022 with the percentage of 16-year-old college starts dropping back to 45% in 2023.
13. Government apprenticeship reforms had a significant impact on 16-to-18 apprenticeship numbers even before the pandemic. The introduction of the levy gave employers new spending power which many of them have used to prioritise older staff already in their workforce. With no change in government policy and no further major economic change, the downturn in 16 – 18 apprenticeship numbers could well continue. It is possible that there will come a point when apprenticeship delivery numbers are so low within colleges that the provision ceases altogether.

## Technology shifts

14. The use of technology in FE has risen dramatically during the pandemic when most learning moved on-line. It seems unlikely that delivery will return to pre-pandemic patterns. Learners have also become more exposed to on-line learning and may well see advantages to learning in this way. On-line materials are also easier to change and thus can be more flexible. Such changes in delivery may well have a greater impact on older learners who need the flexibility that comes with 'on demand' learning, but young people can also benefit.

15. Technology can be used to more effectively match learning to the learner. Whilst such shifts may not result in a greater share of young learners coming to college, how they undertake their learning might well change as a result and learning tailored more specifically to need should result in higher levels of success.

## Changes in aspiration

16. The government has firm ambitions to change attitudes to technical education and to develop higher technical qualifications (at Level 4 and 5) as a firm alternative to full-time degrees. If this works, we could well see some significant shifts in 16 – 18 learner behaviour. Level 4 – 6 provision is predominantly targeted at 18 years and over, but if aspirations were shifted to be more evenly distributed between degrees (L6) and HTQs (L4/5) then we should see a subsequent shift in 16 – 18-year-olds away from A levels and towards FE courses designed to precede HTQs, for example T levels.
17. In 2019 50% of 16-year-olds started to study in college, meaning around 50% (less if NEET figures are included) started to study in School/other environments. HTQs (and the precursor programmes) will take time to embed as will shifts in the public attitude towards them. We assume that such shifts would begin to be seen by 2024, assuming the shift continues to be supported politically. It is unlikely that the growth in the popularity of degrees that started in the 1990s will be fully reversed, but we may see modest movement in favour of HTQs over time.
18. The rise of HTQs could well also impact negatively on Apprenticeships for 16 – 18-year-olds. If employer behaviour continues to dictate the direction of apprenticeships, then over time apprenticeship delivery may well become dominated by older, in-work learners using the programme to enhance and develop skills that will allow progression, leaving little room for new market entrants.
19. Classroom/workshop-based programmes with significant Industrial Placement may well become a more favoured route for 16 – 18 year olds, who would then join the labour market at a later stage with a higher level of skill and remuneration. Such a shift would also see the percentage of young people retained in college until 18 rise as such courses are longer in duration.

20. As data becomes more readily available that demonstrates the return on educational investment for young people undertaking HTQs over traditional degrees, it seems likely that public attitudes towards HTQs will become more positive which, in turn should make precursor programmes more popular.

## Conclusion

Colleges are likely to see unprecedented growth in student numbers due to:

- Demographic upturn and marginal increases in market share.
- Sustained reductions in apprenticeship starts for young people.
- Post-furlough shock and post pandemic economic changes.

Government needs to act to ensure that young people and all those involved in their education know that their education can be supported.

We have four suggestions and policy asks for action:

1. DfE should publish student number projections covering 16, 17 and 18 year olds.
2. HM Treasury should provide a longer-term revenue and capital budget for 16-to-18 education that anticipates demographic trends. Over the spending review period, demographics alone imply an additional 90,000 extra young people in colleges by 2024-5 at a cost of £0.5 billion when fully funded.
3. DfE should adjust its funding formula to provide an automatic guarantee of additional funding for extra 16-to-18 year olds recruited in 2021-2.