



Rialtas na hÉireann
Government of Ireland

Spending Review 2020

Teacher Allocation Model

EDUCATION VOTE, DEPARTMENT OF PUBLIC EXPENDITURE & REFORM AND
DEPARTMENT OF EDUCATION

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This paper has been prepared by staff in the Department of Public Expenditure and Reform and the Department of Education. The views presented in this paper do not represent the official views of the Department or Minister for Public Expenditure and Reform or the Department or Minister for Education.

IGEES

Irish Government Economic and Evaluation Service

Summary

- Expenditure on pay for teachers was just over €4.5 billion in 2019.
- This paper focuses on the processes and mechanisms by which mainstream teaching posts, including principals, are allocated to primary and post-primary schools and how these interact. The rules for allocating teaching posts are set out in circulars published annually by the Department of Education.
- Since 2014, primary level mainstream teaching posts have increased by 2,027 posts and at a post-primary level mainstream teaching posts have increased by 3,073 posts. This has been due to both changes in pupil enrolments or demographics, policy decisions and operational aspects of the teacher allocations process.
- While previous papers have examined the impact of demographics on teacher allocations from an overall policy perspective this paper seeks to examine, in greater depth, the operational aspects of teacher allocation. These operational mechanisms play a role in determining the number of teaching posts each year—understanding them in greater detail will inform better projections of teaching post numbers.
- At primary and post-primary level, mainstream teachers are allocated based on the previous school year's enrolments with an exceptional use of in-year enrolment data for schools where enrolments are expected to grow by a sufficient amount.
- The main operational mechanisms for both primary and post-primary posts can be seen as:

Primary Allocations	2019/20 Posts	Post-Primary Allocations	2019/20 Posts
Ordinary Staffing Schedule Posts	25,014	Ordinary Enrolment Posts	20,374
Developing Posts	139	Other Enrolment Posts	3,708
Appeals posts	91	Concessionary Posts	1,203

Key Trends (2014-2019)

- At primary level:
 - Allocated posts have been largely on the basis of the ordinary staffing schedule, which have experienced an average annual increase of 1.8 per cent since 2014, albeit affected by policy changes;
 - The number of developing posts applied for and approved has fallen steadily, while the proportion of posts approved has stayed relatively constant at circa 71 per cent; and,
 - The number of appeals posts applications have decreased, but the number of posts allocated has remained relatively constant (c.90 posts).
- At post -primary level:
 - The majority of posts allocated have been ordinary enrolment posts — based on enrolments in September the previous year — however, other categories have also gained prominence;
 - Increases in 'other enrolment based posts' have been amplified by policy changes, such as Junior Cycle Reform; and,
 - Concessionary post increases have been largely due to projected enrolment posts. Concessionary posts are similar to appeals posts.

Key Findings

- The mainstream teacher allocation process goes beyond the application of an overall teacher to pupil ratio to enrolments. This transmission is more direct at post-primary level, with considerably more nuances at a primary level.
- While previous projections have been based on different ratios of number of teachers to pupils this analysis indicates that a more detailed approach is needed to better reflect demand based on the existing rules and processes.

- At primary level while the staffing schedule is based on a general average of 1 mainstream classroom teacher to every 26 pupils, there are additional accommodations for schools with lower enrolments. Also, schools have autonomy in how they organise classes within their allocation, which lead to differing class sizes.
- Schools are allocated teaching posts based on the previous year's enrolments. However, if schools expect higher enrolments they can apply for additional posts based on in-year enrolments once certain thresholds have been reached. This leads to a somewhat asymmetric system of allocation where schools can, with sufficient pupil growth, gain a teacher a year earlier than they would have done so otherwise. This aims to ensure sufficient teachers for schools who are growing rapidly.

Primary Level

- The amalgamation of schools and creation of new schools makes the precise estimation of teacher allocation numbers difficult using point in time enrolment data. In addition to national projections of the total school population, other data sources and reviews could be leveraged to provide a more nuanced basis for projections going forward
- Although the staffing schedule currently operates on a general average class size of 26:1, the number of additional pupils required to gain an additional post can range from 5 to 35. This variation arises from additional accommodations in the schedule for small schools and administrative principals.
- The main driver of changes in aggregate levels developing posts is difficult to assess. Recent years have seen a rebalancing of posts away from urban centres and surrounding areas, with "Other" counties comprising an increased proportion of total posts. This will require further analysis to determine its contribution as a driver of posts.
- Pupil enrolments in September must be confirmed before developing posts are approved; if predicted pupil numbers do not materialise the provisional post is not approved.
- The staffing schedule, developing post criteria and appeals post criteria provide accommodations for small schools. Small schools accounted for 17 per cent of teaching posts allocated and 15 per cent of pupils in 2019/20. Small schools represent the largest category for appeal posts, accounting for 67 per cent of all appeals posts. They also accounted for 20 per cent of posts allocated under developing posts over the period 2014-2019.

Post-primary

- The ability to allocate partial posts at post-primary level facilitates the closer alignment of the pupil teacher ratio with the operational outcome of teacher allocation. This is in part due to the nature of post-primary level teaching.
- Ordinary and projected enrolment posts have begun to take a more prominent role in driving the change in teaching posts.
- Ordinary enrolment posts are allocated based on a pupil teacher ratio (PTR) and, therefore, changes in these posts are largely driven by demographics.
- While other enrolment based allocations are also linked to demographic changes these posts have also been influenced considerably by policy changes. Recent years have seen a number of policy changes for 'other enrolment based posts'—such as the introduction of Junior Cycle Reform posts and the restoration of guidance provision—these changes have amplified the impact of growth in the demographics at post-primary level.
- When we consider the share of the total allocations of post-primary teaching posts by county we can see that the share of the allocation tends to be closely matched to the share of the pupils enrolled in a school in that county.

1. Introduction

1.1 Introduction

Education is one of the most labour intensive services provided by the State. Teacher pay accounts for almost 45 per cent of the total education budget.¹ Ireland has one of the youngest populations in Europe with one of the highest birth-rates, thus these cost pressures are expected to continue in the medium term.² However, birth rates have been slowly decreasing in Ireland in recent years. This will impact the allocation of teachers across the Irish education system, as the demographic bubble moves from primary to post-primary level. The aim of this paper is to examine the current method of teacher allocation and the processes involved for determining the allocation of teachers in Ireland. It will examine the operation of this process and the outturn of teacher numbers over the past 5 years.³ This analysis examines mainstream teachers in primary and post-primary schools, including schools with DEIS⁴ status and fee charging schools. This paper is part of an ongoing project between the Department of Public Expenditure and Reform and the Department of Education which seeks to provide a better understanding of these mechanisms and provide better projections of teacher allocations.

1.2 Methodology

The paper draws on desk-based quantitative and process analysis using a range of recently compiled and existing Department of Education administrative data and qualitative information on processes.

1.3 Quality Assurance (QA)

Quality assurance refers to the concepts of:

- Accuracy of the data and other information presented, and
 - Rigour applied in using analytical techniques and integrity in reporting.

As part of the quality assurance process feedback was sought on the analysis format (structure), clarity (quality of writing), accuracy (reliability of data), robustness (methodological rigour), and consistency (between evidence and conclusions). Further detail on the quality assurance process is set out in Appendix 1. It is important to note that involvement in the QA process does not imply agreement with the findings of the analysis.

¹ This includes the capital expenditure, of which pupil enrolments and teacher numbers are also a driver.

² <https://ec.europa.eu/eurostat/documents/2995521/9967985/3-10072019-BP-EN.pdf/e152399b-cb9e-4a42-a155-c5de6dfe25d1>

³ This paper uses data up to and including the school year 2019/20 but does not consider more recent additions to staffing for 2020/21 in response to COVID-19.

⁴ Delivering Equality of Opportunity in Schools

2. Overview and Background

2.1 Background

Previous Spending Review papers have examined the impact of demographics on education expenditure.⁵ These papers used the Department of Education projected enrolment numbers to project the changes in teaching post numbers arising from demographic changes. The latest iteration of Department of Education enrolment projections show a peak for primary level at 567,800 in 2018/19 and post-primary level at 402,000 in 2024/25, with enrolment numbers falling thereafter.⁶ This demonstrates a demographic ‘bubble’ which is currently moving from primary to post-primary level education. This ‘bubble’ should lead to a demographic dividend at primary level that could offset costs, in the coming years, as pressures move into the post-primary level. The speed at which this occurs will be complicated by nuances in the allocation and redeployment processes (as described in Sections 3 and 4). Furthermore, recent enrolment outturns for 2019/20 show only a small fall in primary enrolment numbers as post-primary enrolments continue to climb. It is likely the small decline in primary enrolments indicate the peak has been reached and that numbers will now decline.

The anticipated decline in primary enrolments provides a timely point at which to review the current approach to estimating teacher allocations and the associated cost implications. It is too early to understand the impact COVID-19 will have on enrolments, with potential changes in net migration or changed work practices resulting in increased rural populations, for example. The analysis aims to provide a better understanding of the teacher allocation process in primary and post-primary schools.

These processes are set out by circulars published annually by the Department of Education, setting out the rules and conditions for attaining or retaining a teaching posts. The pupil teacher ratio (PTR) is often referred to in the context of both primary and post-primary teacher allocations, however, it does not have as direct an impact as sometimes assumed. In constructing the primary staffing schedule, account is taken of schools with lower enrolments so only after a school has reached 18 teachers (including the principal) are an additional 26 enrolments required to gain a teacher (Section 3). At post-primary, teaching allocations are more closely aligned to the overall ratio, with account taken to ensure sufficient posts are available for smaller post-primary schools to deliver a range of subjects (Section 4). Both allocation processes also allow for use of two vintages of data—final school enrolments from the previous September for ordinary enrolments and the coming school years data for provisional/projected enrolments (see Section 3 and 4), this further complicates operations and

⁵<https://assets.gov.ie/7300/8864a9009a5549fc9c9a4a7d3515678a.pdf>

⁶ Projections of full time enrolment Primary and Second Level, 2018-2036 (2018) (Updated projections are due to be published shortly) <https://www.education.ie/en/Publications/Statistics/projections/projections-of-full-time-enrolment-primary-and-second-level-2018-2036.pdf>

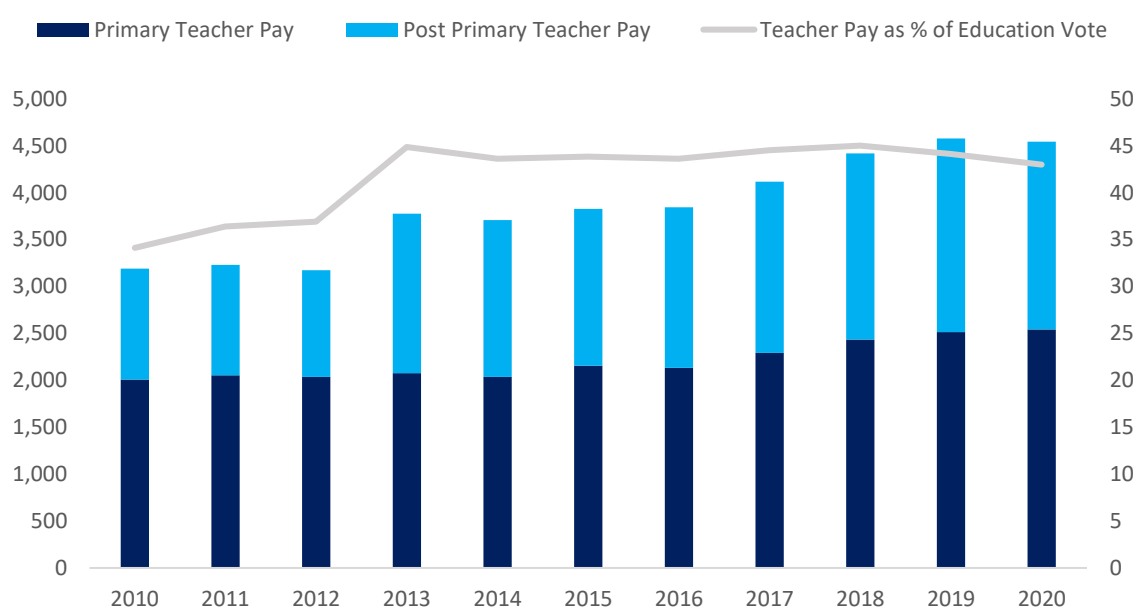
projections. This paper seeks to outline these processes in detail and demonstrates that referring to a PTR does not capture the nuances of the staffing schedule and teacher allocations—highlighting the need to somewhat decouple these concepts in wider discussions of teacher numbers.

2.2 Key Trends

2.2.1 Expenditure and Teacher Numbers

Expenditure on teacher's pay (including special education teachers) amounted to approximately €4.5 billion in 2019, this accounts for 43 per cent of the total education vote (Figure 1). Over the period 2015 to 2019, teacher pay expenditure has increased by €750 million, representing an increase of approximately 20 per cent. This increase is a function of both teacher numbers and rates of pay.

Figure 1: Teacher Pay, 2010- 2020
€ Millions (LHS), Percent (RHS)

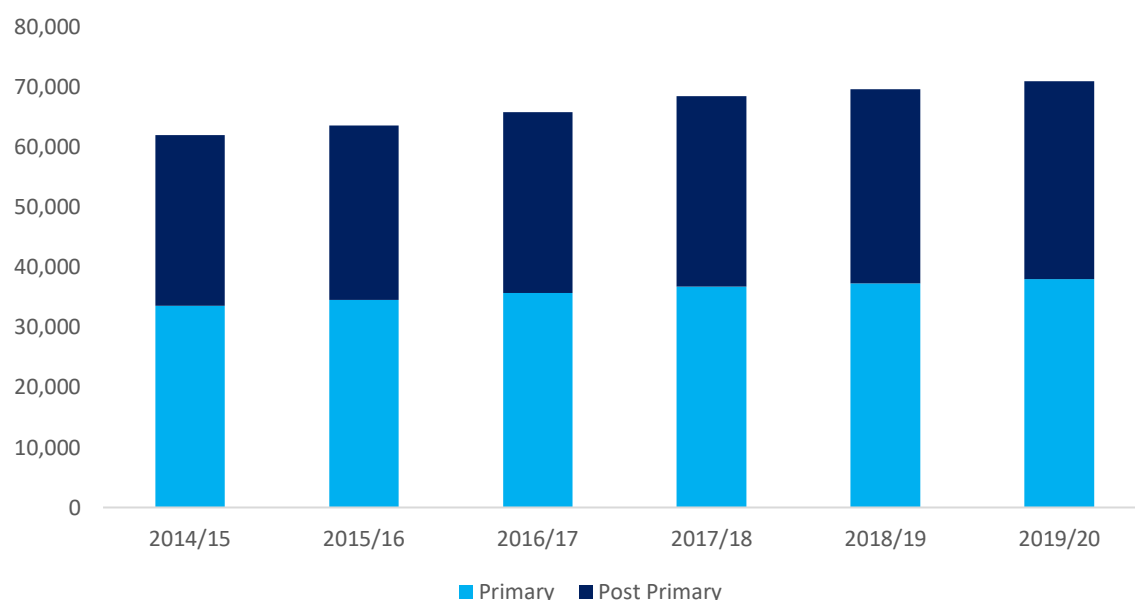


Source: Department of Public Expenditure and Reform and Department of Education

Notes: The early part of this period was effected by the impact of various pay agreements and their reversals in later years.

This increase in expenditure over the past decade was in part due to restoration of pay rates, following the pay agreements introduced during the last financial crisis. However, in addition to these rate increases there has been increasing teacher numbers in more recent years with increases from c. 62,000 in 2014/15 to c. 71,000 in 2019/20. While these numbers include SEN teachers the remainder of this paper focuses on those teachers allocated via the staffing schedule i.e. mainstream teachers and principals.

Figure 2: Trends in Teachers, 2014-2019
Numbers of Teachers



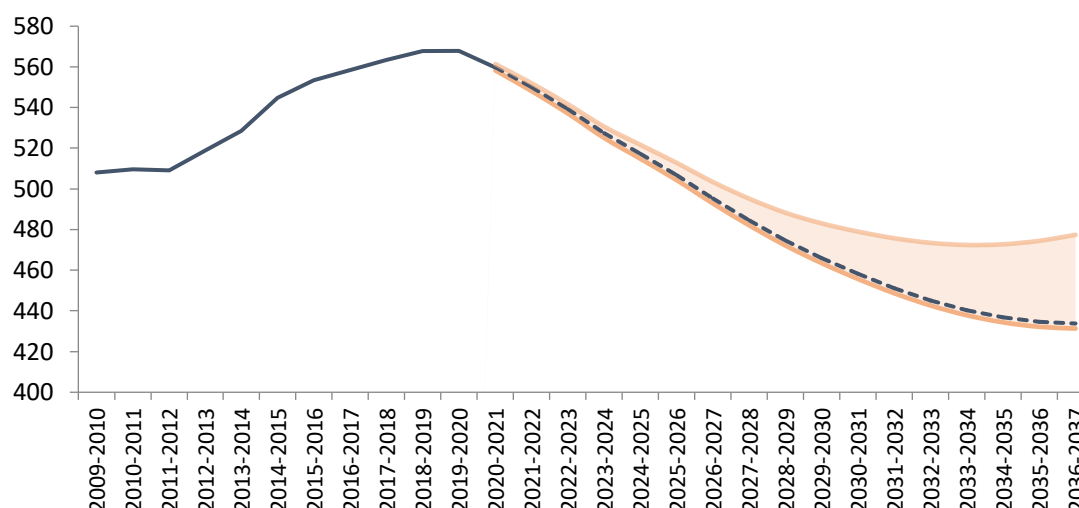
Source: Department of Education Administrative Data

2.2.2 Primary Schools, Teacher Posts and Pupil Numbers

The total number of mainstream primary schools decreased from 3,137 in 2014/15 to 3,106 in 2019/20. In contrast primary school enrolments have increased annually in recent years. In the 2018/2019 school year, the pupil numbers reached a peak of 567,772 (Figure 3).⁷ Since then enrolment numbers indicate a flattening of this growth may be occurring, which is broadly in line with the Department of Education's projections. This peak is expected to move into post-primary education in the coming years. The resulting decrease in enrolments at primary level will require further analysis, with consideration of redeployment and retirement patterns, to achieve a realignment of teaching posts as appropriate.

⁷ This includes special school enrolments

Figure 3: Primary Pupil Enrolments 2009 - 2019 and Projected Enrolments 2019-2037
Thousands of Enrolments



Source: Department of Education, projected enrolment reports 2018

Notes: The dotted line represents the central enrolment projection taken as M2F1 as per the DES enrolment projection report. Projected enrolment range reflects alternative scenarios included in that report.

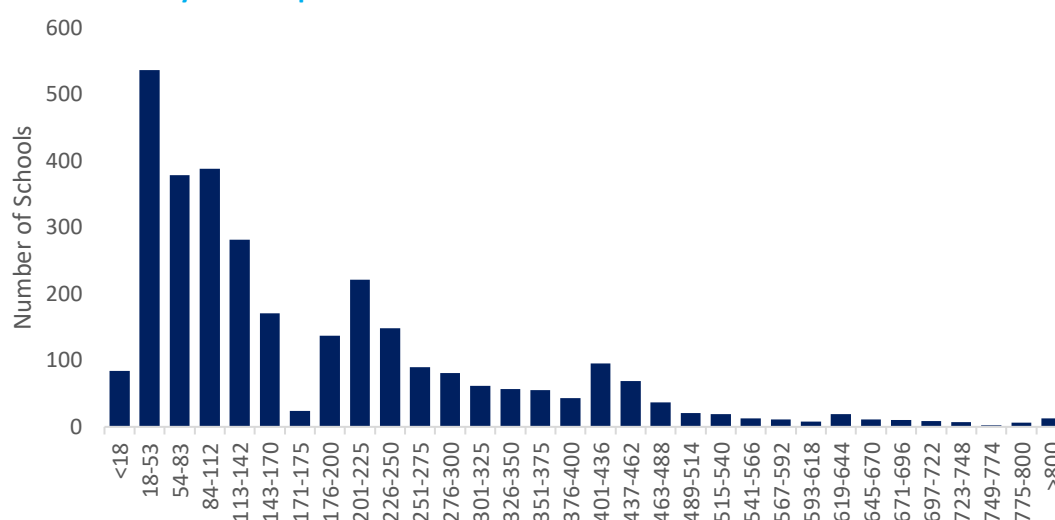
This increase in pupil numbers has contributed to increases in the total number of posts within primary education, from 33,613 in 2014/15 to 38,025 in 2019/20. An additional 13 per cent (4,412 posts) within 5 years.⁸ Of these, c. 2,007 are mainstream classroom teachers, with the remaining 2,405 posts being language support, resource, special class and special school.⁹ Over this time, there were also changes to policy which impacted teacher numbers.¹⁰ The distribution of school sizes also impacts overall teacher allocations at primary level, with smaller schools at the lower half of the staffing schedule benefiting from additional accommodations making it easier to attain and retain teachers. Figures 4 presents the distribution of school sizes across the staffing schedule thresholds for 2019/20.

⁸ Table 1 in Appendix 2 provides more details

⁹ Mainstream classroom teachers include administrative principals allocated via the staffing schedule

¹⁰ Changes to the staffing schedule, e.g. decrease in the general average from 27:1 to 26:1 in 2018 and more recently alterations for small schools.

Figure 4: Distribution of schools (2019/20)
Number of Primary Schools per Schedule Band



Source: Department of Education Administrative Data

2.2.3 Post-primary Schools, Teacher Posts and Pupil Numbers

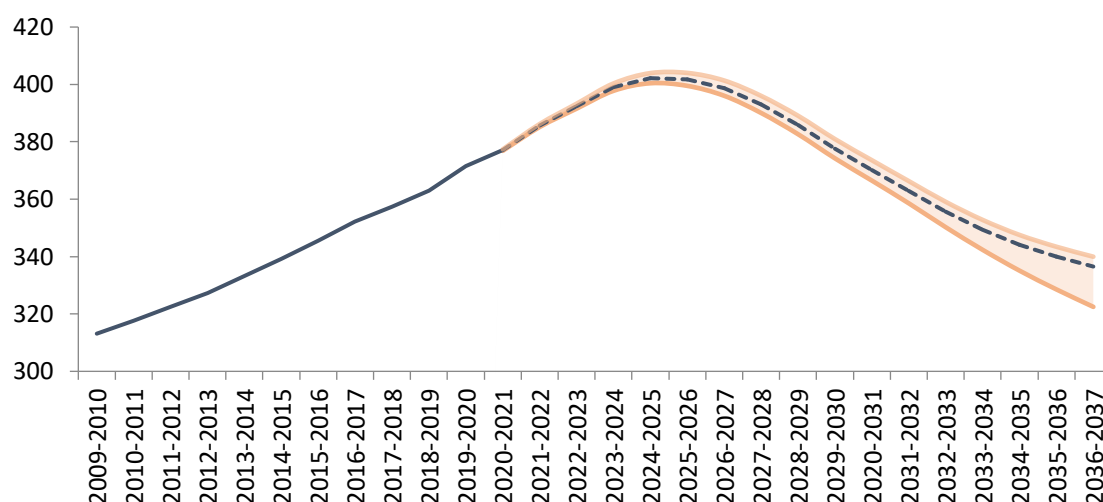
There are 723 post-primary schools in Ireland during the 2019/20 school year.¹¹ Post-primary enrolments have been increasing by an average of 2 per cent year since 2014/15 reaching 371,000 in 2019/20, as can be seen in Figure 5. This, along with policy changes, has contributed to an increase in mainstream teacher numbers from 22,350 in 2014/15 to 25,660 in 2019/20.

Forecasts carried out by the Department of Education suggest the number of enrolments in post-primary schools will continue to increase in the coming years, and are anticipated to reach a peak of over 402,000 in 2024, at which point post-primary enrolments will begin to decline.¹² This increase in post-primary enrolments reflects the anticipated shift of demographic pressure as students transition from primary to post- primary.

¹¹ In addition, there were 29 PLC only colleges. Seven new post-primary schools opened in September 2020.

¹² Teacher Demand and Supply Model (Department of Education, 2019)

Figure 5: Post- Primary Enrolments and Projected Enrolments
Thousands of Enrolments



Source: Department of Education

Notes: Central enrolment projection taken as M2F1 as per the Department of Education enrolment projection report (2018). Projected enrolment range reflects alternative scenarios included in that report.

3. Primary School Teacher Allocation

3.1 The Staffing Schedule in Primary Schools

The criteria and conditions for allocating mainstream teaching posts are set out by circulars published annually by the Department of Education.¹³ These circulars include annual staffing schedules. The Primary Staffing Schedule for the 2019/20 school year is included in Appendix 2. The schedule operates by allocating teacher numbers based on the numbers of pupils enrolled in a school. The circulars provide for specific circumstances a school may experience, such as when enrolments are growing rapidly or it is losing a teacher. These include developing posts and appeal posts.¹⁴

The schedule is divided into bands of pupil numbers; when a school's enrolment number changes and the school moves into a different band, then a teaching post is gained or lost. The staffing schedule is underpinned by the following principles:

- Schools are allocated posts based on the previous year's enrolments. However, if schools expect higher enrolments they can apply for additional posts based on in-year enrolments.

¹³ Special schools and special classes are not part of this paper.

¹⁴ While the staffing schedule determines the number of teachers in each school, the actual configuration of class sizes and the deployment of classroom teachers are done at local level. Depending on the circumstances within an individual school, there can be variations in class sizes in a school. School authorities are expected to ensure classes are kept as low as possible by the Department of Education. The Department also requests authorities to use their autonomy under the staffing schedule to implement smaller class sizes for junior classes. These requirements are published annually in a circular on staffing arrangements. Where a school experiences a surplus of teachers, relative to pupil enrolments, the Department of Education has a redeployment process in place for teachers which are on the redeployment panel.

- Mainstream classroom teachers in primary are allocated as whole posts, this is why pupil numbers are grouped into bands.¹⁵
- All schools have a minimum of one teacher, this may be the teaching principal.
- Larger schools have administrative principals, this happens after the 7th teacher is allocated.¹⁶ While schools below this point have principals also teaching classes.
- The average class sizes are slightly smaller in smaller school to reflect multi-grade classes (i.e. mixed classes).
- Schools however, have autonomy in how they organise classes within their allocations. This can lead to differing class sizes.

The primary school staffing schedule for teacher allocation was first introduced in the Rules for National School (1965). Since then, the staffing schedule has developed gradually over time, and is published annually to incorporate different policy measures introduced.¹⁷ The gradual incorporation of policy changes has had a cumulative effect on the staffing schedule—when additional measures were introduced, previous measures were not removed.

The Department of Education circular 0019/2019 states that “the primary staffing schedule will continue to operate on the basis of a general average of 1 classroom teacher for every 26 pupils.” This refers to the overall classroom teacher allocation ratio for the school, and not a reference to the individual class sizes or average class size, which is decided locally by each school.¹⁸ Depending on where a school is within the band this can have different impacts on the ratio of pupils to teachers. Figure 6 below illustrates the general average pupil per classroom teacher by taking pupil number at the midpoint of each band on the staffing schedule and dividing by the classroom teachers (including teaching principals) for each band.¹⁹ The midpoint is illustrative and taken because a school may be anywhere within a given band. This demonstrates the “general average of 1 classroom teacher for every 26 pupils” applies only from the point on the staffing schedule where a school has 6 classroom teachers (i.e. a principal plus 5 mainstream classroom teachers). As seen in Figure 7, the narrow band at which an administrative principal is appointed reduces the general average for this band; with the average classroom size rising to 26 pupils to 1 classroom teacher thereafter.

¹⁵ This is unlike post-primary teacher allocations where partial posts are allocated.

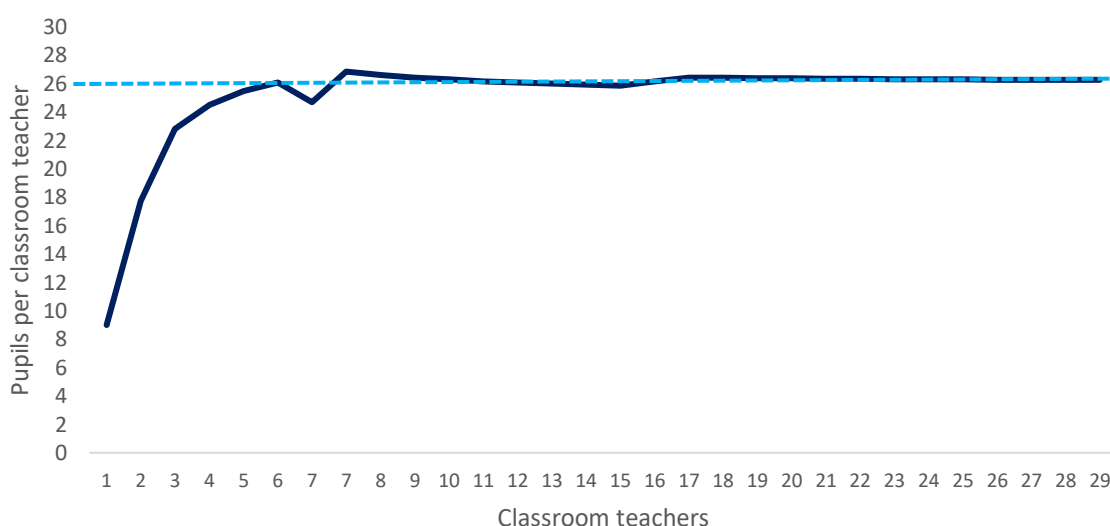
¹⁶ For the 2019/20 academic year this is 176 pupils.

¹⁷ For example, Budget 2009 provided an additional 500 teacher posts to be allocated towards medium sized schools.

¹⁸ In 2019/20 the average class size was at 24.1.

¹⁹ Figure X and X reflect the staffing schedule for an ordinary school, they do not reflect accommodations for Gaeltacht or DEIS schools.

Figure 6: Pupils per teacher at the mid-point of the staffing schedule bands
Pupils per classroom teacher



Source: DES staffing schedule, Circular 0019/2019

Note: The double 7 in the horizontal reflects the threshold where an administrative principal would be allocated.

Examining enrolments to attain additional teachers (including an administrative principal) shows the different enrolment changes required at different points in the schedule (Figure 7). It illustrates how at certain points in the schedule, large increases of pupil numbers are needed to gain a teacher. While at the point where administrative principals are appointed, only a small number of additional pupils are needed (these can contribute to multiple gains in teacher numbers in a particular year for a school, particularly for developing schools see Section 3.3).

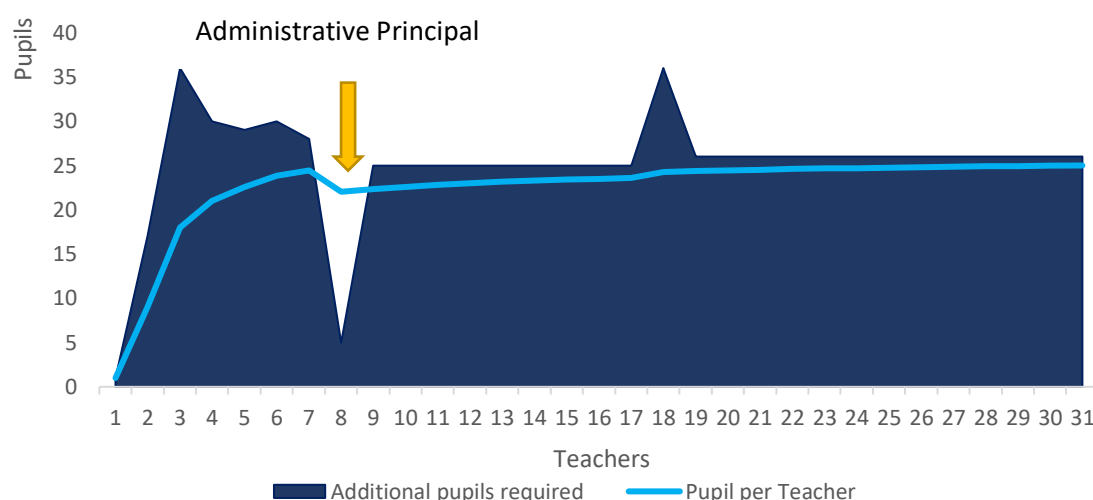
These thresholds also apply when pupil numbers reduce and a school goes into a different band on the schedule, which sees a reduction in their allocation of teachers. The schedule includes averages that are more favourable to small schools.²⁰ Recent years has seen a fall in the staffing schedule general average from 28:1 in 2014/15 to 26:1 from 2019/20, with additional accommodations made for small schools. Small schools benefit from slightly lower thresholds when pupil numbers are reducing to aid teacher retention in schools with fewer than 5 teachers. A summary of the changes made to the staffing schedule from 2014 – 2019 can be found in Appendix 5.

While figure 6 presents the average number of pupils required for a school to receive a post, figure 7 presents the additional pupils required at the margin to receive a post. This shows the differences between the extra pupils needed for a post and how the average number of pupils per post evolves along different points of the staffing schedule.

²⁰ Small schools are defined as four mainstream teachers or fewer (P+3 on the staffing schedule given at this stage of the schedule a principal is a teaching principal and counts towards the Mainstream classroom numbers)

Figure 7: Additional Pupils Required to Gain a Teacher/Pupils per Teacher at the minimum point of the threshold

Pupils



Source: DES staffing schedule, Circular 0019/2019

Note: Teachers here include the administrative principal after the 7th teacher.

3.2 Timeline for Primary Teacher Allocation Process

The teacher allocation process begins a year prior to the academic year.²¹ A number of steps are followed for planning, data gathering, data confirmation and final teacher allocation (Figure 8).

In September (T-1), schools upload their final enrolment data onto the Primary Online Database (POD) to confirm their enrolments for the year. This data is verified by PPSN, by Department of Education before being published in January (but which remain provisional until June).²² In January the Teacher Allocation Unit publish the staffing schedule for the coming year. The schedule sets out enrolment bands for allocating teachers and is applied to each schools enrolments from the previous September (T-1). Schools notify the Department of Education of posts that are surplus to their requirements. In addition, as part of their oversight role the Teacher Allocation Section within the Department of Education will also identify all schools that are losing posts and contacts them if a school has not already notified the Department.

Typically, around March/April, schools host information evenings for enrolling to the school in September (T). Applications allow schools estimate their projected enrolments and identify any

²¹ i.e. teacher allocation preparation for the academic year 2020/21, begins in 2019/20 academic year

²² PPSN is used for verifying enrolments, however, in some cases this is not possible as parents do not provide PPSN in enrolment applications.

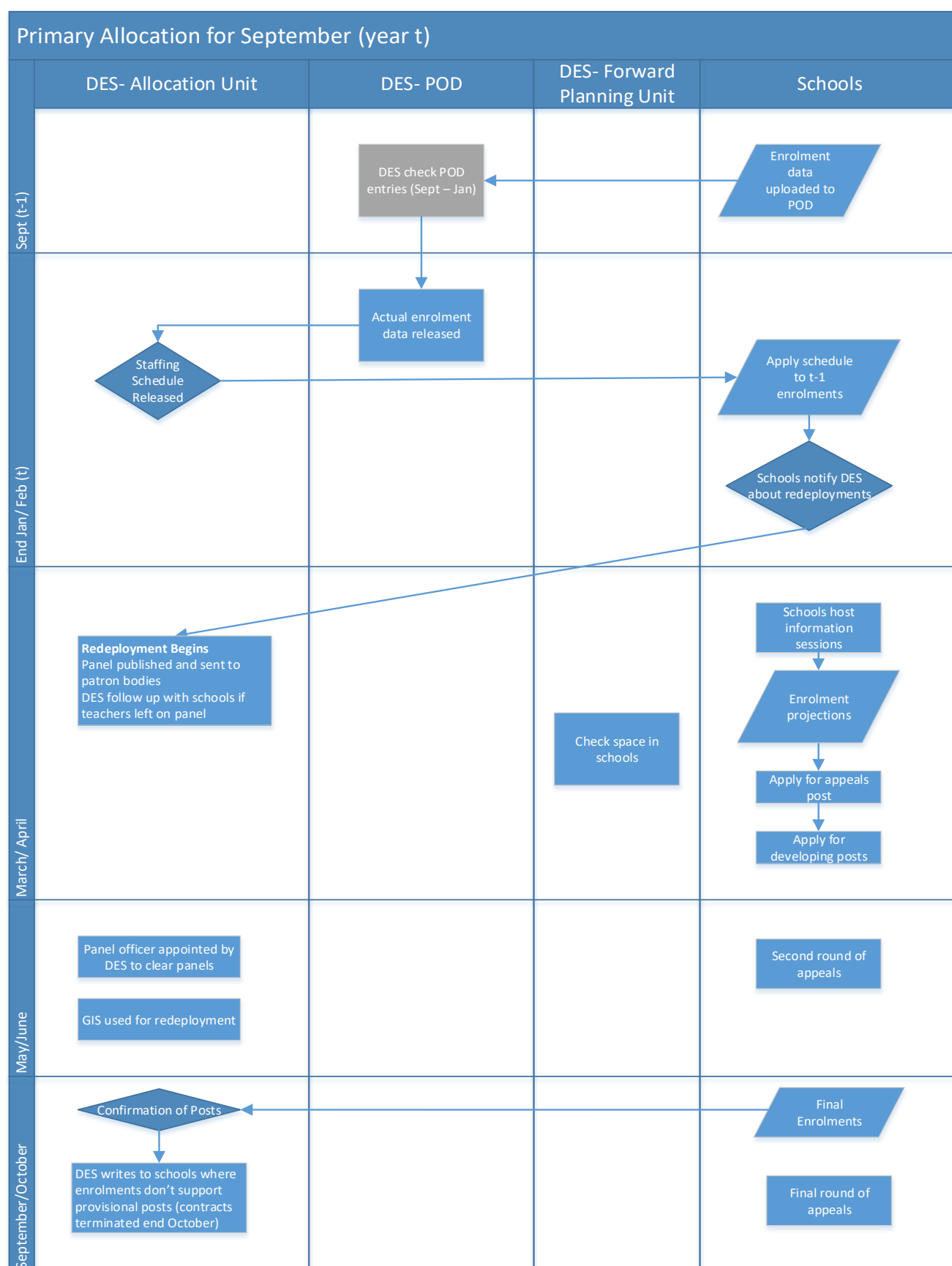
developing post requirements for the coming September (T).²³ Schools may then apply for a developing or appeals post. The appeals process has three meetings in the year to consider any appeals, these take place around March, June and October.²⁴ The process of staff redeployments then begins. Schools which have surplus teachers will place the most junior permanent/ Contract of Indefinite Duration (CID) holding teacher onto a teaching panel to be redeployed to other schools that have vacancies. This process involves panel operators engaging with schools under their patronage to clear panels in their respective areas. By May/June, Department of Education may appoint a panel officer to clear any teaching panels if there are still schools with remaining vacancies to be filled. Geographical Information Systems (GIS) is used to redeploy teachers to their nearest vacancy.

In September/October, schools confirm their final enrolments and the Teacher Allocation Section will terminate any posts provisionally allocated through the developing schools or appeals process where that school did not enrol sufficient pupils. Teacher Allocations Section will then confirm with Payroll the number of posts which are terminated as a result of schools not reaching the required enrolments.

²³ At this point prospective pupils could be registered for more than one school, there is no cross checking of PPSN etc., this makes it difficult to accurately estimate where additional posts will arise definitively in the September. This is one of the reasons developing posts are only approved provisionally until actual enrolments are returned in September.

²⁴ Schools tend to submit most appeals in the first phase, which decreases in the following two rounds. Different appeals categories tend to occur in different phases. For example, small school and enrolment submissions are at their highest levels in March, while developing post appeals are highest in October once the school year begins and enrolments are confirmed.

Figure 8: Primary Allocation Process Map



3.3 Developing School Posts

3.3.1 Background

Where a school projects a sufficient increase in pupil numbers for the following academic year, they can apply for additional posts be allocated to a school, known as developing posts. Developing posts are allocated on a provisional basis; and only approved after the confirmation of enrolments at the end of September.²⁵

The current criteria are set out in Table 1, where schools must meet either, criteria 1(A) or 1(B), and criteria 2. Two derogations exist for schools, those with fewer than 7 teachers (i.e. those with a teaching principal or multi-grade classes) experiencing an increase in enrolments, and where allocating more than one developing post (see Appendix 1 for more details). To qualify for a developing post the additional projected pupils must bring the school into the next band on the staffing schedule, and be a minimum of five pupils over the next schedule threshold.

Table 1: Developing School Criteria 2020

Developing Schools Criteria		Derogations	
1. (A)	Minimum increase of 15 pupils in primary schools with a principal and six or less teachers, and an average class size of 26:1	1.	Schools seeking a second mainstream classroom teacher (in addition to a teaching principal), and projecting a minimum increase of 15 pupils in excess of enrolment <u>do not</u> have to meet excess of 5 pupils or average class size. But must have minimum enrolment of 54 pupils
(B)	An increase of 25 pupils in primary schools with a principal and seven or more mainstream classroom teachers	2.	Schools must meet the requirement of the minimum numerical increase and the stipulated excess number of 5 pupils on the appointment figure for the first developing school post. In the case of each post sought thereafter, the stipulated excess number of 5 pupils on the appointment figure must be met
2.	Schools must have an excess of five pupils above required appointment figure		

Source: Department of Education Circular 19/2019

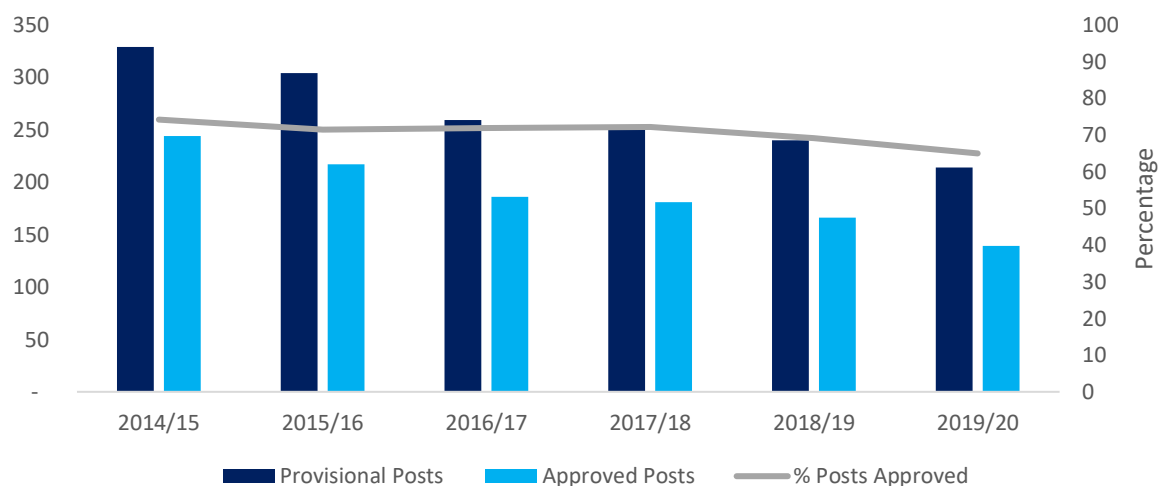
3.3.2 Developing Post Trends

The total number of developing post applications decreased by 40 per cent, from 181 in 2014/2015 to 147 in 2019/2020 (Figure 9).²⁶ Both provisional developing posts and approved posts decreased, with a 9 per cent fall in the proportion of posts approved from 2014/2015 to 2019/2020. From 2014/2015 to 2019/2020 an annual average of 71 per cent of provisional developing posts were approved, with a decrease overtime in the rate of approval. Small schools account for 20 per cent of overall developing posts allocations from 2014 to 2019. The number of developing posts allocated to small schools fell by over 50 percent, from 44 posts in 2014/2015 to 21 in 2019/2020. It should be noted considerable changes to the staffing schedule, with extra supports for small schools, also occurred from 2014-2019.

²⁵ If actual enrolments do not satisfy the criteria in table 1 then developing post is not approved and the school cannot employ the teacher(s).

²⁶ Schools may apply for more than one developing post in an application if they expect to surpass two thresholds in September.

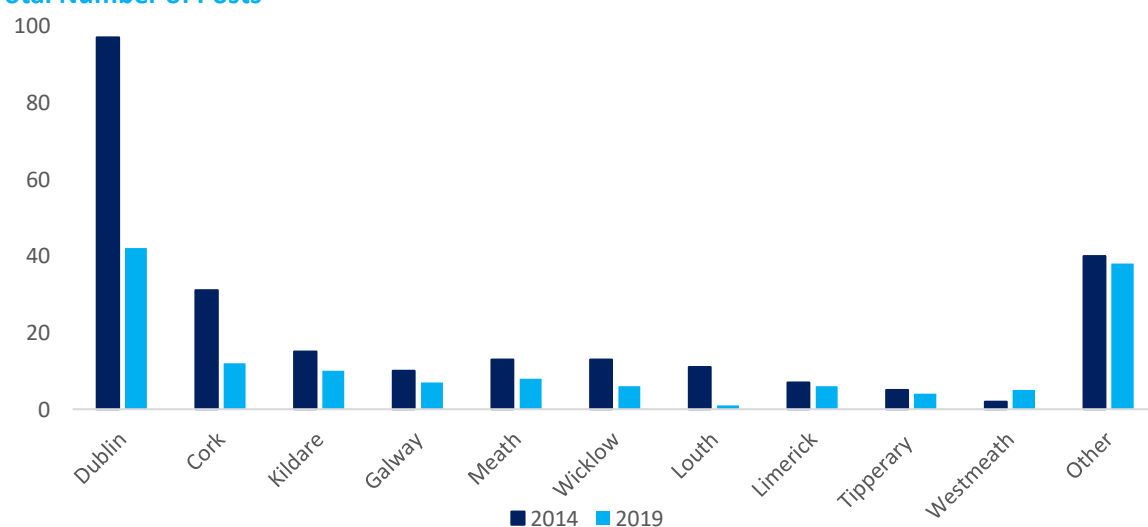
**Figure 9: Provisional Developing Posts and Approved
Number of Posts (LHS) Per cent (RHS)**



Source: Department of Education Administrative Data

The distribution of developing posts by county shows the prominence of larger urban centres and commuter counties in 2014 (Figure 10). However, as the overall number of posts fell over time, the regional distribution has also shifted with rural counties experiencing a smaller decline in posts allocated. While, in 2014, Dublin made up a large portion of developing posts, at 40 per cent, this decreased to 30 percent by 2019. However, rural counties did not experience the same decrease in allocations over time, leading “Other” counties to increase their proportion of developing posts allocated, gaining prominence over time.²⁷

**Figure 10: Regional Distribution of Developing Posts (2014/2019)
Total Number of Posts**



Source: Department of Education Administrative data

Notes: Top ten counties in terms of developing posts are shown with the remaining counties amalgamated as ‘Other’.

²⁷ ‘Other’ counties include all those outside the top 10 in terms of developing post allocations as included separately in this graph.

3.4 Appeals Posts

3.4.1 Appeals Posts

Another element of the teacher allocation process is appeals posts. These occur where a school, due to lose a post or failed to gain a post, appeals to an independent Appeals Board for a review.²⁸ Any posts granted by the Board are allocated on a provisional basis, pending the confirmation of enrolments by end of September. When established in 2002, there were only four circumstances in which the Board facilitated appeals, but by 2019 the number of exceptions had increased to seven (Table 2).

Table 2: Appeals Post Criteria

2002	2019
Accommodation Difficulties	Exceptional Accommodation Difficulties
Enrolment Posts will be satisfied	October Enrolment has been satisfied
Meet necessary class size guidelines	English as Additional Language Support
Where a post granted under a developing school criteria was incorrect	Developing Posts based on additional Enrolments
	Small Schools
	Schools losing 3 or more posts in one year
	Alleviating demographic pressures

Source: Circular 19/2019: Staffing arrangements for primary schools for year 2019/2020 school year

Notes: More detail on these criteria can be found in the Staffing Schedule circular for each year.²⁹

While the number of appeals applications have decreased over time, the total number of posts approved has remained relatively constant, at an average of 90 posts annually (Figure 11). Since 2014/15, an average of 60 posts were allocated for small schools, compared to 12 posts for October enrolments or 18 for developing posts. This suggests small schools are the major driver behind the appeals posts allocation.

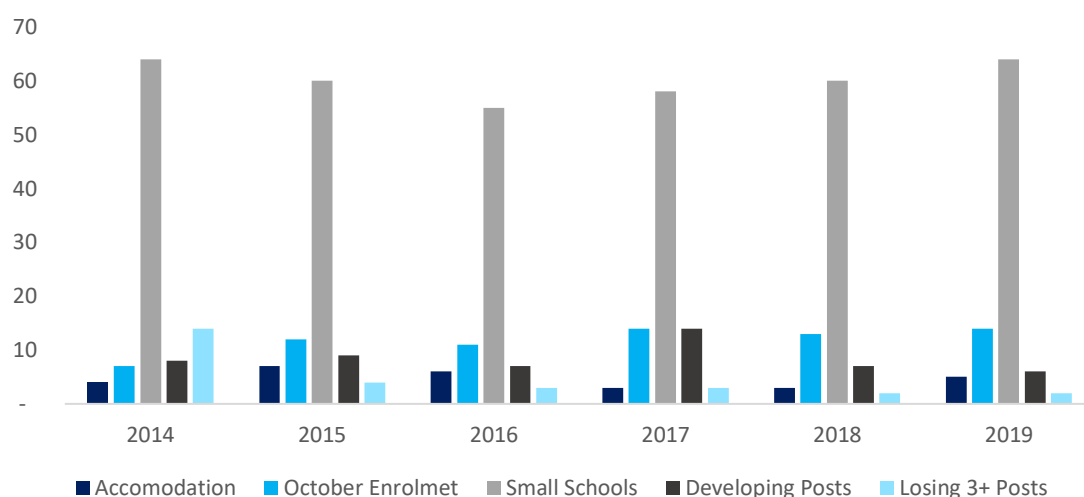
The counties which received the highest number of appeals posts is reflective of those counties which have large numbers of small schools or high population growth. Figure 11 below, shows that the counties with the largest annual average allocation of appeal posts from 2014 to 2019 were Dublin (13), Cork (9) and Galway (8).³⁰ While all “Other” counties had a combined annual average allocation of 3 posts.

²⁸This mechanism is included in the staffing schedule circular and considers each application on its own merits. It assesses whether a school is deploying its mainstream classroom teachers in the most appropriate manner. English Additional Language (EAL) posts can also be appealed under this process. However, these posts are provided in a support role under the Special Education Teaching Model (rather than teaching posts). As a result, EAL posts are not included in this analysis despite following the same process for undertaking an appeal.

²⁹ https://www.education.ie/en/Circulars-and-Forms/Archived-Circulars/cl0019_2019.pdf

³⁰ These are in the top 5 counties with the most appeals allocations, Dublin received 75 posts, Cork 57 received posts and Galway received 47 posts in total

Figure 11: Successful Appeals Posts 2014-2019
Number of Posts



Source: Department of Education Administrative Data

Notes: Graph does not include EAL posts which are granted under the appeal process

3.5 Other Factors Impacting Allocations³¹

3.5.1 Small Schools

There are 1,386 mainstream small schools in the primary school system (45 per cent of total mainstream primary schools).³² These schools accounted for 17 per cent of teaching posts allocated and 15 per cent of pupils in 2019/20. The staffing schedule is more favourable for smaller schools to support multi-grade class teaching. Schools also have a lower retention threshold to retain a teacher where they would have lost one, this supports the continuation of these schools within the community. Retention allows schools to retain teachers they were previously allocated, if their enrolment numbers fall to below the appointment threshold number but remain above the retention threshold.

Since 2015, the number of pupils required to gain an additional teacher as a small school has decreased given the reductions made to the staffing schedule criteria. In 2019/20 small schools were 45 per cent of all schools, down slightly from 48 per cent in 2014/15, and are most commonly found in larger, more rural, counties such as Cork (10 per cent), Galway (10 per cent), Donegal (9 per cent) and Mayo (8 per cent).

³¹ Table 1 in Appendix 2 shows the number of small, DEIS, Gaeltacht and Island Schools 2014-2019.

³² Small schools are defined, as per the staffing schedule circular, as schools with 4 mainstream classroom teachers or fewer. Small schools accounted for 81,781 pupils in 2019/20 academic year.

3.5.2 DEIS Urban Band 1 Schools

Delivering Equality of Opportunity in Schools (DEIS) is a programme that aims to address and prioritise the education needs of children and young people at risk of educational disadvantage.³³ DEIS primary schools are split into three categories; Urban Band 1, Urban Band 2 and Rural.

The DEIS programme allows for a reduced class size in the Urban Band 1 primary schools through a different staffing schedule than that of ordinary schools. The DEIS Urban Band 1 schedule operates on a general average class size of:

- 22:1 for vertical schools,
- 20:1 for junior schools,
- 24:1 for senior schools.³⁴

3.5.3 Gaeltacht and Island Schools

Accommodations are made for Gaeltacht and Island Schools within the staffing schedule. Schools that are located within a Gaeltacht region are subject to a slightly different teaching schedule to other schools. These schools have the same appointment rate as ordinary schools but lower retention rate. Similarly, primary schools that are located on islands can avail of a more favourable staffing schedule.

³³ In the 2019/20 academic year, there were 693 primary schools in the DEIS programme.

³⁴ Vertical schools are schools that have classes from Junior Infants to 6th Class. Junior schools are schools that start in Junior Infants and finish in either 1st Class or 2nd Class. Senior schools start classes in either 1st Class or 2nd Class and go up to 6th Class.

4. Post- Primary Sector

4.1 Post-Primary Teacher Allocations

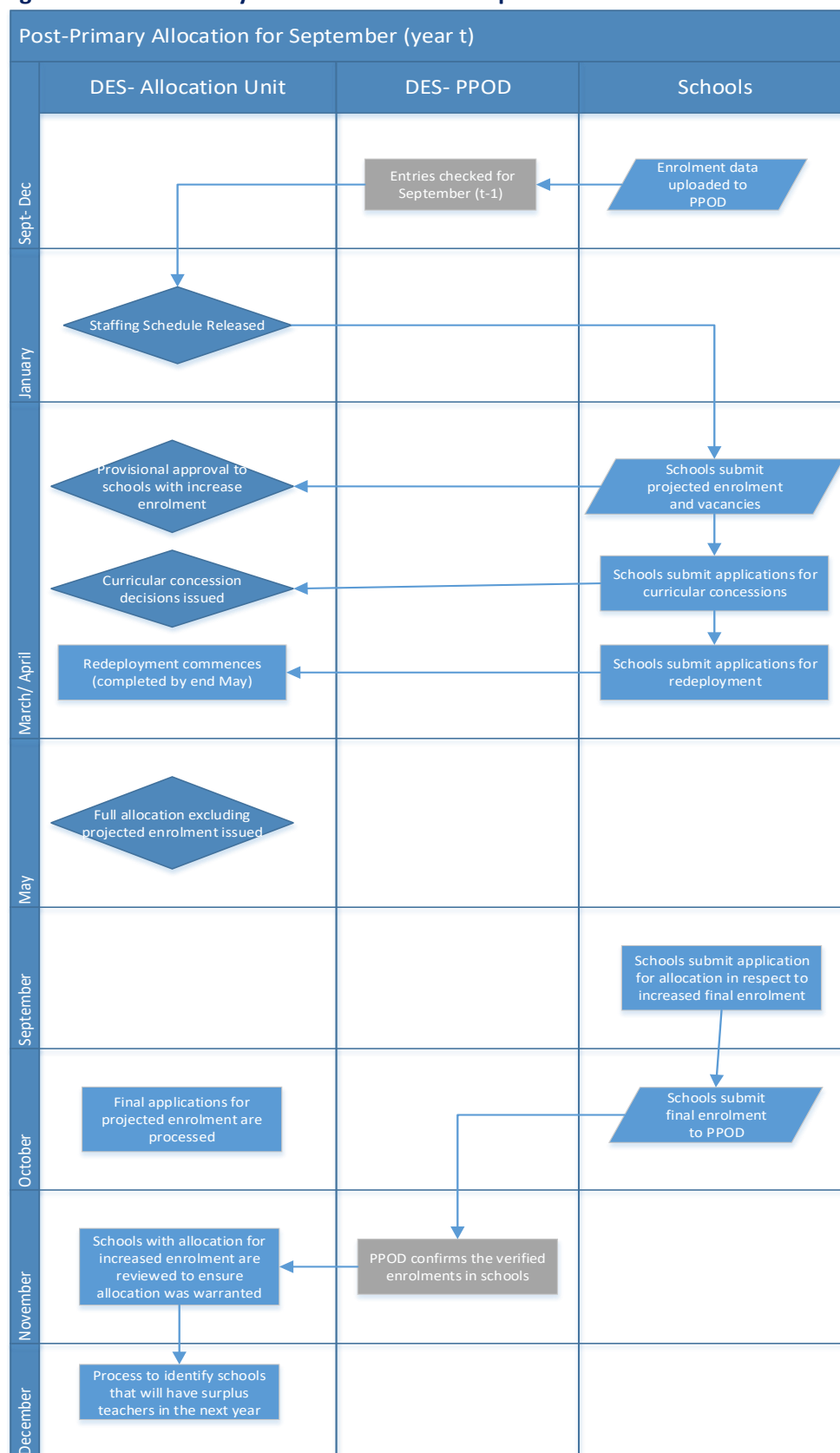
Similarly to the allocation process in the primary sector, post-primary teacher allocations are approved annually, based on recognised pupil enrolment, as set out in the relevant circular issues in January each year. The majority of posts are allocated based on the previous year's confirmed enrolments, with some exceptions for in-year enrolments growth.

4.1.1 Timeline for Post-Primary Teacher Allocations

A detailed overview of the post-primary teacher allocations can be found in the process map (Figure 12). The process for allocations for September in year T commences in September T-1 when schools upload their enrolment data. Following this the section responsible for maintaining the Post-Primary Online Database (PPOD) within Department of Education begin the process of checking this data between September and January. In January/February Department of Education release a circular setting out the approved teaching posts for the forthcoming year, following which schools receive their allocation for the forthcoming academic year based on their enrolments in year T-1. In March/April, the Department of Education issue provisional approval to schools anticipating increased enrolment. At this stage of the process schools can submit applications for curricular concession posts and the Department of Education issues a decision with respect to these posts. Schools which are not satisfied with the Department of Education's decision with respect to curricular concessions have the opportunity to appeal to an Independent Appeals Board at this stage. The redeployment process also commences at this time and is completed by the end of May.

By the end of May, the Department of Education issues the final staffing schedule to all schools excluding allocations with respect to projected enrolment increases which schools apply for in September when their final enrolment is known. In December, the Department of Education begins the process of identifying those schools which have a surplus allocation in the following school year.

Figure 12: Post-Primary Allocations Process Map

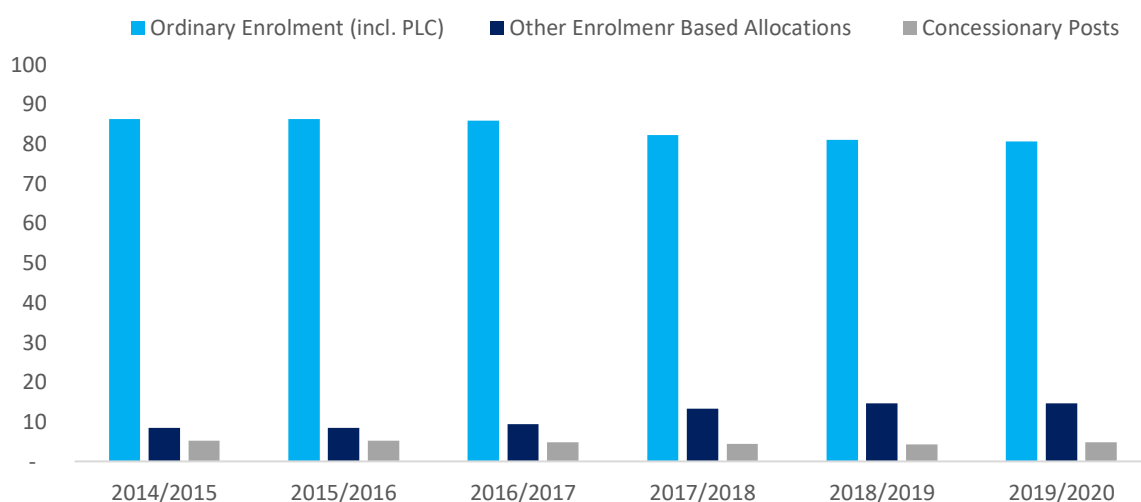


4.2 Types of Posts

For the purpose of this analysis it is useful to consider teacher allocations in three broad categories;

- Ordinary Enrolments and PLC Posts³⁵
- Other Enrolment Based Posts
- Concessionary Posts

Figure 13: Post-Primary Allocations by Type of Allocation (2014/15 – 2019/20)
Per cent of Total Posts



Source: Department of Education, Administrative Data

Notes: Ordinary enrolment posts are based on a PTR, other enrolment based allocations include posts such as guidance and deputy principal posts, and concessionary posts include various appeals posts and posts for schools with increasing enrolments.

As the Figure 13 shows ordinary enrolment posts account for approximately 80 per cent of post-primary posts. The share that these posts represents has decreased marginally between the 2015/16 and 2019/20 academic year (from 86 per cent to 80 per cent). Other Enrolment Based Allocations have increased their relative share of the posts from 9 per cent in 2014/15 to 15 per cent in 2019/20

4.2.1 Allocations for Ordinary Enrolment

Each school receives a set allocation based on their enrolments in year T-1, which schools submit to the Department of Education. A ratio of 19:1 is applied to all “free scheme” post-primary schools, such schools account for over 90 per cent of post- primary schools. A ratio of 23:1 is applied in respect to pupils in schools outside the free education system (i.e. recognised fee-charging schools), which accounts for less than 10 per cent of post-primary schools.³⁶ Using this ratio teachers are allocated on

³⁵ Following the establishment of the Department of Further and Higher Education PLC posts will no longer be the responsibility of the Department of Education

³⁶ Fee charging schools may also hire teachers privately outside this process.

a pro-rata basis. For example, a school with 1,000 pupils will receive an allocation of 52.6 teachers. Unlike primary level, partial posts are allocated.

There were almost 18,800 teaching posts allocated for ordinary enrolment in post-primary schools in 2019/20 with an additional 1,500 allocated with respect to PLC enrolments.³⁷ Allocations for Ordinary Enrolment in post-primary schools have increased by approximately 8 per cent between 2014/15 and 2019/20.

4.2.2 Other Enrolment Based Allocations

a) Guidance Provision

Due to the restoration of guidance provision, guidance posts have seen one of the largest increases in numbers in recent years and represents one of the largest categories of posts within the Enrolment Based Posts. This increase has arisen due to the changes in provision for guidance counselling in recent budgets. For example in Budget 2016 an additional 300 post-primary teaching posts were allocated in order to ensure suitable guidance provision in each school.³⁸

Increased allocation for guidance provision is administered to schools based on their enrolments in the form of a reduced Pupil Teacher Ratio (PTR)³⁹. Table 3 sets out the various reductions that have been applied to the PTR in recent years for guidance provision.

Table 3: Reduced PTR for Guidance Provision

Pupil to Teacher Ratio

	2012	2016	2017	2018	Total Reduction	PTR 19:1 Less Reduction
Free Education Scheme		0.3	0.1	0.1	0.5	18.5
DEIS Schools	0.75	0.3	0.1	0.1	1.25	17.75
Fee Charging			0.2	0.1	0.3	18.7

Reflecting the restoration of Guidance provision in post-primary schools beginning in 2016, this type of allocation has seen a large growth between 2017 and 2019 with an additional 120 guidance posts allocated bringing the total to approximately 724.

b) Junior Cycle Reform

The PTR is also reduced to facilitate Junior Cycle Reform (Table 4). This allocation is for professional time to allow teachers to engage in professional collaborative activities to support teaching, learning and assessment. Upon the introduction of Junior Cycle Reform in 2017/18 it was anticipated that full

³⁷ Allocations with respect to PLC students are calculated based on a PTR of 19:1.

³⁸ Additional posts were also provide in each Budget 2017 and 2018

³⁹ This allocation is the difference between the reduced PTR and the ordinary enrolment.

implementation would see an allocation of 550 teaching posts. Over 530 posts were allocated for Junior Cycle Reform in the 2019/2020 academic year⁴⁰. For mainstream teachers this is provided for as follows;

Table 4: Junior Cycle Reform PTRs
Pupil to teacher Ratio

	Reduction PTR	of Ordinary less Reduction	PTR
Free Education Scheme	0.53		18.47
Fee Charging	0.53		22.47

c) Principals and Deputy Principals

Each recognised school is allocated a Principal while Deputy Principals are allocated based on the ratios outlined in Table 5. According to these ratios a school with up to 150 pupils will receive 0.25 Whole Time Equivalents (WTEs) for Deputy Principal while the maximum allocation with respect to Deputy Principals is 3 WTEs. The majority of post- primary schools have over 400 pupils.⁴¹

Table 5: Deputy Principal Allocation
Whole Time Equivalents

Pupil Enrolment (including PLC)	Deputy Principal (WTEs)	Allocation
1-150		0.25
151-300		0.50
301-400		0.75
401-699		1.00
700-899		2.00
900+		3.00

The allocation with respect to principals has remained relatively constant between 2014/15 with approximately 731 in 2014/15 compared to 752 in 2019/20. In contrast, the allocation with respect to Deputy Principals increased by 128 per cent (an increase of almost 500 posts) over the same period bringing the total number of deputy principal allocations to 888 WTEs. This increase followed the provision of an additional 250 posts in Budget 2016 and an additional 170 posts in Budget 2017 to facilitate school leadership.

d) Leaving Certificate Applied (LCA)

An allocation of 0.5 WTE post is granted on receipt of confirmation from a school that the LCA programme will be provided. The LCA is a two year programme designed for those students who do not wish to proceed directly to third level education or for those whose needs, aspirations and

⁴⁰Schools also receive 22 hours professional time for Junior Cycle Reform in respect of each whole time equivalent (WTE) Special Education Needs and Special Class post.

⁴¹ Approximately 60% of Post- Primary schools have over 400 enrolments in 2019/20.

aptitudes are not adequately catered for by the Leaving Certificate or the Leaving Certificate Vocational Programme.

Approximately 154 posts were allocated with respect to students taking part in the Leaving Certificate Applied. This has remained relatively constant between 2014/15 and 2019/20.

There are number of other categories included in the enrolment based allocation posts (Appendix 4).

4.2.3 Concessionary Posts⁴²

a) Curricular Concessions

Concessions can be made if a school faces an unexpected skills shortfall in specific subject areas which it has not been in a position to resolve through school planning and management processes may apply for additional staffing as a short term support. These concessionary posts may not be sought to;

- Enable schools to retain or develop a curricular provision that cannot be sustained within enrolments, staffing entitlements and school plans.
- Facilitate the sanction of an application from a teacher for approved leave of absence, i.e. job share, career break or secondment.

Applications for these posts are processed by the Department of Education, who assess whether there is need for such a concession. If the curricular issue persists schools must reapply in subsequent years, schools can receive a concessionary post in relation to the same curricular issue for up to 3 years. Staff in the Department of Education's Teacher Allocations Section assess the information provided in the application and review the school's record for the previous 3 years and the current staffing to determine if the hours requested are required to complete the timetable. Concessions are not granted for the same subject for more than 3 years.

The number of curricular concession posts has fallen from 277 in 2014/15 to 196 in 2019/20.

b) Projected Enrolment

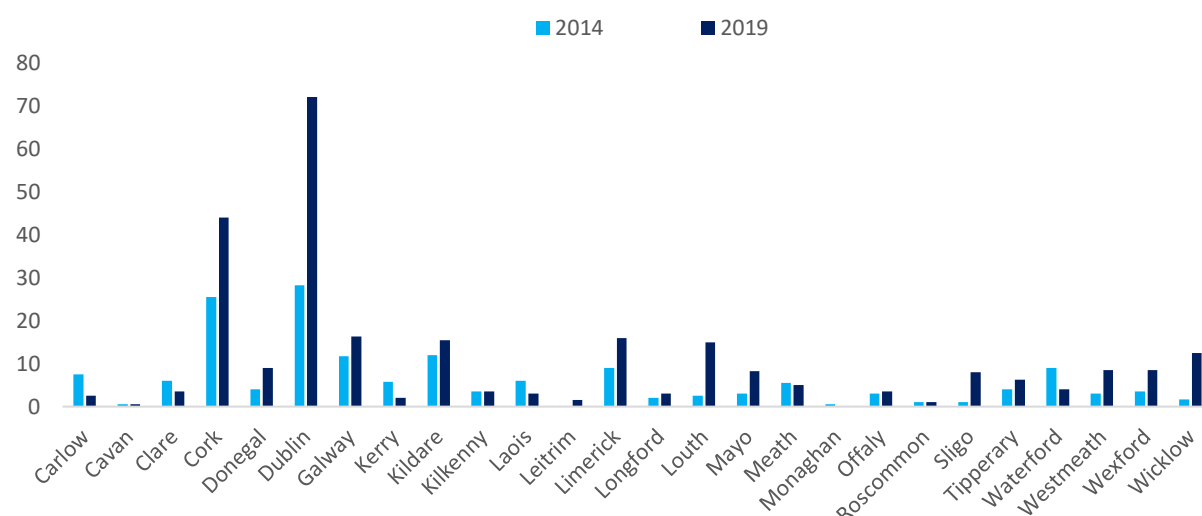
Schools that project an increase in enrolment may apply for additional allocation. Applications for these additional allocations are made in March and the Department of Education issue provisional approval in April. Schools then submit a form to the Department of Education in September after the school has re-opened and final enrolments can be confirmed, at which point schools receive this allocation.

⁴² Additional posts are also provided for English as an Additional Language, these are support teachers under the special education model they are not included in this paper.

Approximately 550 posts were allocated in 2019/20 for projected enrolments, an increase of 50 per cent since 2014/15. This reflects in part the progress of the demographic bubble from primary to post-primary schools. However, it may also be due to movements of pupils within the post-primary sector. The asymmetric nature of projected enrolments means in certain circumstances these enrolments cause posts to be attained a year earlier than would otherwise be the case—while schools who lose enrolments do not lose a post until the following year. In other cases, schools do not gain a post until the following year where if taking in-year enrolments only they would have received the post.

Projected enrolment posts appear more prevalent in urban centres, as can be seen in figure 14. Dublin and Cork have each seen a large increase in the number of projected enrolment posts between 2014 and 2019.

Figure 14: Change in Projected Enrolment Posts (2014- 2019)
Number of Posts



Source: Department of Education

4.2.4 New Schools

In newly opened schools the principal is appointed on or after 1 September of the year before the new school is due to open.

On receipt of the projected enrolment for the first 3 years of the school, Teacher Allocations Section will issue the initial staffing schedule for the first school year. The allocation is based on the projected enrolment figure for the first school year. Initial allocation includes the following:

- Principal
- Deputy Principal
- Ordinary enrolment
- Guidance Provision
- Junior Certificate Schools Programme (if applicable to the school)
- Junior Cycle Reform

Principals may submit an application in March for curricular concessions to request an additional allocation required to provide a full curriculum in the school. Application for curricular concessions are sanctioned by end April.

4.3 Regional Spread of Allocations

When we consider the share of the total allocations of post-primary teaching posts by county we can see that the share of the allocation tends to be closely matched to the share of the pupils enrolled in a school in that county (Table 6).

Table 6: Share of Teacher Allocations and Enrolments by County
Per cent of Total

	Total Allocation	Enrolments	Schools	Projected Enrolment Posts	Curricular Concessions (incl. appeals)
Carlow	1	2	1.5	0.9	1.0
Cavan	1	2	1.5	0.2	0.0
Clare	2	2	2.5	1.3	3.2
Cork	11	12	11.8	16.3	7.6
Donegal	3	4	3.7	3.3	1.1
Dublin	21	25	25.3	26.7	28.3
Galway	5	5	6.5	6.0	10.6
Kerry	3	3	3.6	0.7	7.3
Kildare	4	5	3.9	5.7	2.0
Kilkenny	2	2	2.2	1.3	1.6
Laois	1	2	1.4	1.1	1.5
Leitrim	1	1	1.0	0.6	0.2
Limerick	4	4	3.9	5.9	4.0
Longford	1	1	1.2	1.1	0.3
Louth	3	3	2.5	5.6	1.0
Mayo	3	3	3.6	3.1	4.6
Meath	3	4	3.0	1.9	2.3
Monaghan	1	1	1.7	0.0	1.0
Offaly	2	2	1.5	1.3	0.9
Roscommon	1	1	1.2	0.4	2.1
Sligo	1	1	1.8	3.0	2.1
Tipperary	4	4	4.1	2.3	7.3
Waterford	2	3	2.4	1.5	2.5
Westmeath	2	2	1.8	3.2	1.1
Wexford	4	3	3.0	3.2	2.8
Wicklow	3	3	3.3	4.6	4.6
Other*	10	NA	0.0	0.0	39.3

Source: Department of Education administrative data and authors calculations

Notes: * ETB for which county data was not available for this analysis.

5. Allocations 2014-2019

The processes described above were applied to the final pupil numbers for both primary and post-primary level for the period 2014-2019.⁴³ Broadly, the numbers attained for allocations at school level matched those allocated in the specific year. This exercise shows the replication of the process ex-post is possible and will provide a key input into the forecasts of teacher allocations in future analysis.

At primary level, the number of mainstream posts estimated for each academic year in this exercise were generally consistent with the posts allocated by the Department of Education (Table 7). On average, there was an annual variation of -0.26% in the model from posts allocated from 2014 – 2019, an average of -57 posts. The higher level of variation between the modelled posts and actual posts in the 2015/16 and 2016/17 academic years can be attributed to a number of amalgamations of schools in these years that resulted in new school roll numbers, which makes ex-post modelling more complicated.⁴⁴

For developing posts, the number of posts allocated by the Department of Education were broadly in line with those modelled in this exercise, with only minor differences. These estimated posts were modelled by applying the developing post criteria to Department of Education school enrolment data to replicate the allocation process. On average, there was an annual variation of 2 per cent in posts allocated from 2014-2019, an annual average of 21 posts.

Table 7: Primary Level Differences between Modelled Posts and Actual Outturns
Percentage Difference

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Average
Mainstream Post Difference	-0.23	-0.72	-0.61	0.03	0.08	-0.09	-0.26
Developing Posts Difference*	-1.23	-0.92	-1.08	-4.42	-1.20	-3.60	-2.07

Note: *There are circumstances where a school may not fully satisfy the criteria but will receive a developing post, e.g. will receive a post the following year, school of similar patronage/ language of instruction within 8km, panel and redeployment purposes.

Similarly at post-primary level, the number of teaching posts modelled for each academic year in this exercise were generally consistent with the posts allocated by the Department of Education (Table 8). These estimates are based on applying the PTR, outlined in section 4 of this paper, to enrolment data to examine the extent to which the process can be replicated. The average difference for ordinary

⁴³ Given the criteria for appeals posts depends on school specific situations, such as accommodation issues or anticipating additional enrolments in October, the data is not always available. As a result, it was not possible to estimate the number of appeals posts that should have been allocated and compare this with the outturn.

⁴⁴ In these cases, the enrolment for t-1 is 0 and when the schedule is applied they will receive an allocation of 1 in the exercise. However, the actual allocation the amalgamated schools will receive will be higher as the existing staff of the pre-amalgamated schools can remain in the newly amalgamated school.

enrolment posts (the largest category of posts) as 0.05 per cent. Similarly, the estimated number of Projected Enrolment posts, allocated to schools which expect to see an increase in enrolments, is broadly similar to outturn with an average difference of 2 per cent difference, though there is greater deviations observed in relation to this allocation. Guidance posts which are allocated using a reduced PTR were 4 percent different on average across the years included in this analysis. With the exception of the year in which Junior Cycle Reform began the estimated number of posts is broadly similar to the number allocated by the Department of Allocation.

Table 8: Post-Primary Difference between Modelled Posts and Actual Outturns
Percentage Difference

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Average
Ordinary Enrolments	-0.04	-0.01	-0.10	-0.03	-0.07	-0.04	-0.05
Guidance				-10.76	-8.06	-7.50	-4.39
Junior Cycle Reform				115.63	-0.15	-0.02	-0.04
Deputy Principals			0.35	-7.83	-7.62	-7.09	-3.70
Projected Enrolment	13.50	7.65	-8.16	0.12	-0.88	-0.24	2.00

Note: *2017/18 is excluded from this average as the cycle reform was introduced in 2017/18, there was a lower number of posts taken up in that year, however this difference could not be built into the estimated posts based on the circular in this exercise.

5.1 Contribution to the Change in Allocations 2014-2019

Sections 3 and 4 have discussed the categories of teacher allocations for both primary and post-primary schools. These categories have each contributed to the overall change in teacher numbers at primary and post-primary level. This section seeks to deconstruct this overall change into its component parts i.e. the underlying change in each of the categories discussed for primary and post-primary teachers (Sections 5.1.1 and 5.1.2 respectively).

5.1.1 Primary

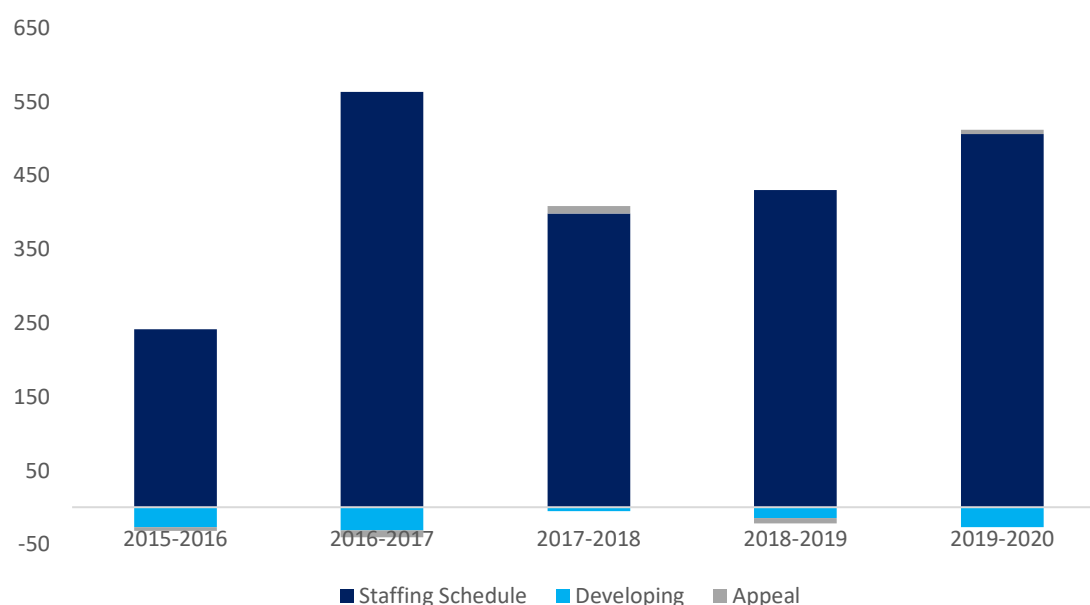
The changes in primary school post numbers can be broken down between three main categories:

- Staffing schedule posts
- Developing posts
- Appeals posts.

Figure 15 shows the nature of the overall changes from 2014-2019. The key contributor to the change in teaching posts has been from posts allocated via the staffing schedule (i.e. allocated based on t-1 enrolments). On average, there was an increase of 428 staffing schedule posts each year. In contrast, the average number developing posts have been decreasing since 2014, with an average annual reduction of 21 teachers. Appeals posts have remained relatively constant, albeit with some

fluctuation between any two given years. This suggests developing posts and appeals posts have less of an impact on overall teacher allocations post numbers than other categories.

Figure 15: Components of change in overall allocations y/y
Change in number of posts



Source: Department of Education Administrative Data

As mainstream staffing posts are allocated on the basis of the staffing schedule, this suggests changes to the staffing schedule and average number of pupils per staff could have a considerable impact on the number of teaching posts. To examine the effect that changing the primary staffing schedule has on mainstream classroom teacher numbers, this section examines how alterations to the general average in the primary staffing schedule would impact these allocations. Two alternative scenarios are first examined:

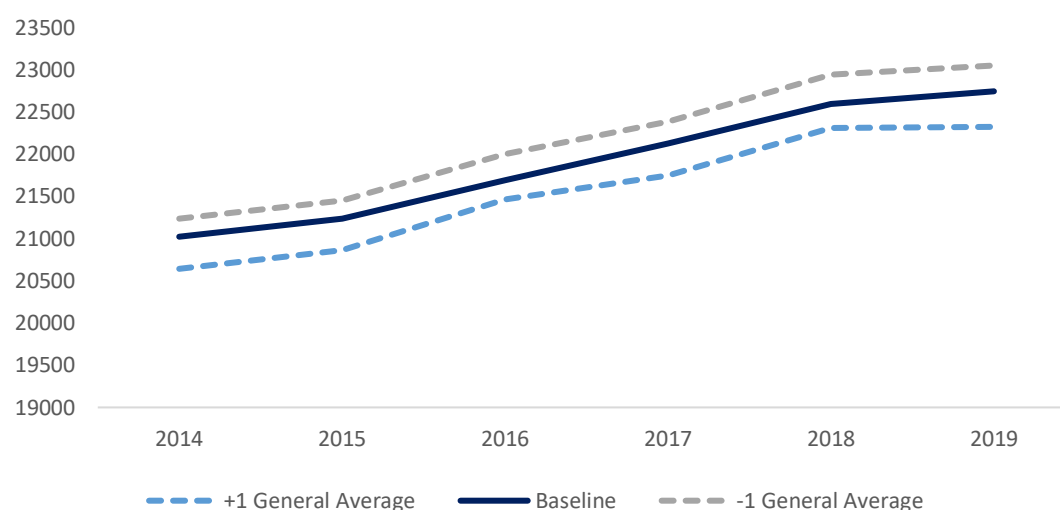
- (i) primary staffing schedules that increased the general average of 1 classroom teacher by +1 pupil , and
- (ii) Schedules which decreased the general average by -1 pupil for each year were created.

For example, where a staffing schedule had a general average of 1 classroom teacher for every 26 pupils then this was changed to 1 classroom teacher for every 27 pupils (+1 change in the general average) and also 25 pupils (-1 change in the general average). ⁴⁵The trend in number of posts from 2014-2019, using the actual schedule, the +1 general average scenario and the -1 general average is

⁴⁵ Detail on how these staffing schedules were created, and an example of this process, can be found in Appendix 6.

shown in Figure 16. Increasing the general average by one pupil results in 344 fewer teaching posts on average. Reducing the general average by one pupil results in 275 additional posts on average.

Figure 16: Staffing Schedule Posts +/-1 to general average 2014-2019
Teacher Numbers



Source: Department of Education administrative data and authors calculations

The upward trend in the number of teaching posts in Figure 16 is the result of both reducing the general average in the teaching schedule and also increasing pupil enrolments. Figure 17 below examines these effects by creating two alternative scenarios:

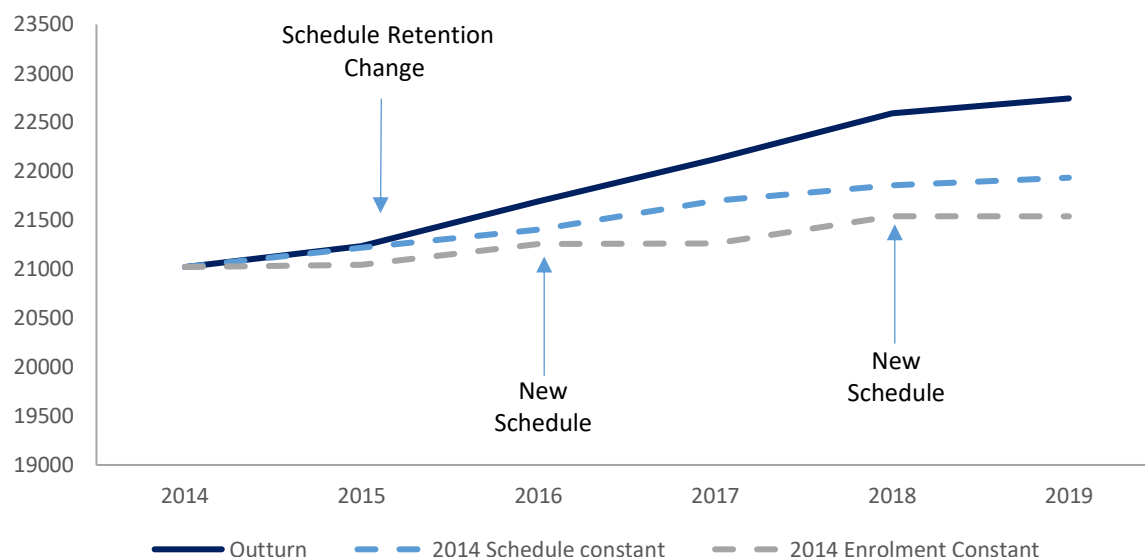
- (i) To isolate the effect the teaching schedule have on the number of posts, the trend in posts was found by holding the pupil enrolments in 2014/15 constant and applying the staffing schedule, and general average of the schedule, for each year from 2014 to 2019. In this scenario teaching posts increased by 518 from 2014-2019.
- (ii) To isolate the effect enrolments have on the number of posts, the trend in the number of posts were found holding the 2014/15 schedule constant and applying general average for that year, while applying the pupil enrolments for each year from 2014 to 2019. In this scenario posts increased by 913.

The baseline from Figure 16 (i.e. using the actual enrolments and staffing schedules) was then compared with the number of posts under the two scenarios can be seen in Figure 17. In the baseline, teaching posts increased by 1,722 from 2014/15 to 2019/20.

Figure 17 shows the impacts when demographic effects are isolated and policy changes affect teaching posts. When the 2014 schedule is held constant across years, it is evident there is a steeper increase in the number of posts compared to when the 2014 enrolment is held constant. This effect flattens in

the later years in line with enrolments. This shows while changing the staffing schedule has had an effect on teaching posts, the increasing population has been a greater driver over the period 2014-2019.

Figure 17: Teaching Posts, 2014/15 Staffing Schedule and Population Constant
Teacher Numbers

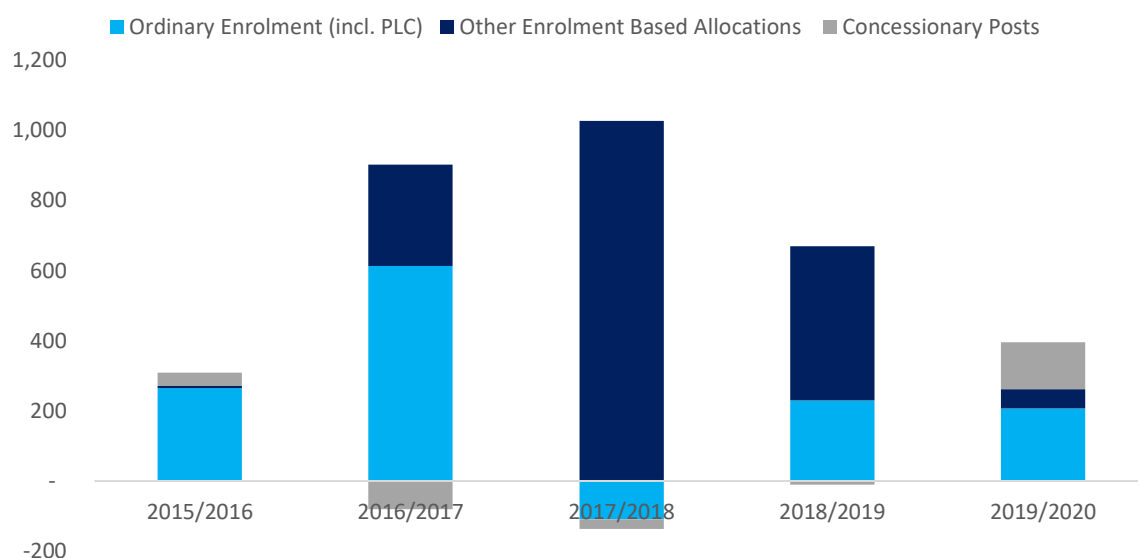


Source: Department of Education administrative data and authors calculations

5.1.2 Post-Primary

The change in post-primary teacher numbers can be broken down into ordinary enrolment based, other enrolment based, and concessionary posts. Figure 18 shows the composition of this overall change for 2014-2019. Since 2014 increasing numbers of other enrolment based posts were responsible for the largest share of the change in post-primary posts. This was due to policy changes such as the introduction of Junior Cycle Reform posts and the restoration of guidance provision in post-primary schools. Figure 18 also illustrates that ordinary enrolment allocations have also relatively consistently contributed to the increase in post-primary posts. While concessionary posts changes have remained relatively constant over the period.

Figure 18: Composition of the Change in Post-Primary Allocations by Type of Post Teaching Posts



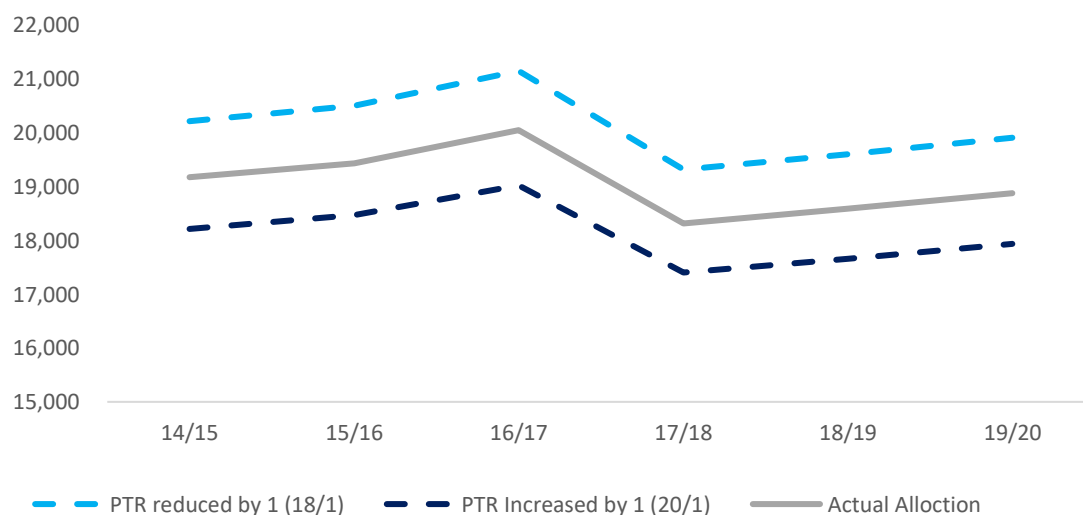
Source: Department of Education Administrative Data and authors calculations

Notes: SEN Allocation has been excluded from the other enrolment based allocation category and the concessionary post category as these posts are outside the scope of the paper

The closer alignment of post-primary allocations to the PTR means the transmission of alterations in the PTR have a more direct impact on teacher numbers. It is estimated a reduction in the PTR by one pupil results on average in an additional 1,148 teaching posts being required each year. An increase in PTR by one pupil results on average in 1,022 fewer teacher posts each year⁴⁶.

Figure 19 shows the number of ordinary enrolment posts allocated and the estimated number of posts based on a PTR of 18/1 and a PTR of 20/1 for Ordinary Enrolment posts.

Figure 19: Change to PTR for Ordinary Enrolment Posts Teaching Posts



Source: Department of Education administrative data and authors calculations

⁴⁶ This has been calculated by changing the PTR for Ordinary Enrolment posts and Projected Enrolment post by 1 and applying a corresponding 1 point change to posts allocated based on a reduced PTR (i.e. Guidance and Junior Cycle Reform Posts).

6. Conclusion

This paper has examined the process for mainstream teaching post allocation at primary and post-primary level. While previous papers examined the impact of demographics on teacher allocations from an overall policy perspective, this paper seeks to examine in greater depth the operational aspects of teacher allocation. These operational aspects of the system play a role in determining the number of teaching posts each year—understanding these operations will inform better projections of teacher numbers.

At primary and post-primary level, mainstream teaching posts are allocated based on enrolments at 30 September in the previous school year, with exceptions where enrolments in a school are expected to grow by a sufficient amount when in-year enrolments are used. This means there is an asymmetric process of allocations in any given year. Accommodations for small schools are also a driver of teaching posts at primary level. This is a feature in the operation of the staffing schedule generally, and the allocation of developing posts and appeals posts.

This paper has demonstrated the transmission of a pupil teacher ratio to teaching post numbers is highly complex. This transmission is more direct at post-primary level, in part due the ability to allocate partial posts, with considerably more nuances at a primary level. While forecasts to date have been based on different ratios of the number of teachers to pupils, this analysis indicates that a more detailed approach is needed to better represent demand, based on the existing rules and processes, while also reflecting increased complexity at primary versus post-primary level.

Appendix 1: Quality Assurance Process

Quality Assurance Process

To ensure accuracy and methodological rigour, the authors engaged in the following quality assurance process.

✓ Internal/Departmental

✓ Line management

✓ Spending Review Sub-group and Steering group

☐ Other divisions/sections – Central Votes Section and the Public Service Reform and Delivery Office.

☐ Peer review (IGEES network, seminars, conferences etc.)

✓ External

☐ Other Government Department

✓ Advisory group

☐ Quality Assurance Group (QAG)

☐ Peer review (IGEES network, seminars, conferences etc.)

☐ External expert(s)

☐ Other (relevant details)

Appendix 2: Primary School Summary Statistics and Staffing Schedule – 2019/20 School Year

Table A.2.1: Primary Schools Summary Statistics 2014 - 2019

Year Starting	Total Posts*	Principal, Deputy & Mainstream Classroom Posts	Total Mainstream Schools	Small Schools	DEIS Urban Band 1 Schools	Gaeltacht Schools	Island Schools
2014/15	33,613	23,217	3,137	1,485	195	133	13
2015/16	34,576	23,426	3,124	1,449	191	134	13
2016/17	35,669	23,948	3,115	1,413	190	145	12
2017/18	36,773	24,351	3,111	1,414	233	139	12
2018/19	37,341	24,759	3,106	1,395	232	138	12
2019/20	38,025	25,224	3,106	1,386	231	138	12

Source: Department of Education

Notes: Small schools as defined under the staffing schedule as 4 teachers or fewer. *Total teaching posts includes both mainstream and special education teacher posts

Schedule of Enrolment of Pupils Governing the Appointment and Retention of
Mainstream Class Teachers in **Ordinary Schools, Gaelscoileanna and Gaeltacht National Schools**
for the 2019/20 school year

(The figures required for these purposes are enrolments on 30th September 2018)

STAFFING SCHEDULE FOR 2019/20 SCHOOL YEAR			
Principal plus mainstream classroom teachers (MCT) as follows:	Ordinary Schools & Gaelscoileanna Appointment & Retention	Gaeltacht Schools	
		Appointment	Retention
P+1	18*	18*	17
P+2	54**	54	51
P+3	84***	84	81
P+4	113	113	95
P+5	143	143	121
P+6	171	171	152
P+7	176	176	157
P+8	201	201	191
P+9	226	226	226
P+10	251	251	251
P+11	276	276	276
P+12	301	301	301
P+13	326	326	326
P+14	351	351	351
P+15	376	376	376
P+16	401	401	401
P+17	437	437	437
P+18	463	463	463
P+19	489	489	489
P+20	515	515	515
P+21	541	541	541
P+22	567	567	567
P+23	593	593	593
P+24	619	619	619
P+25	645	645	645
P+26	671	671	671
P+27	697	697	697
P+28	723	723	723
P+29	749	749	749
P+30	775	775	775

Note 1: For the 31st MCT and upward, add an additional 26 validly enrolled pupils for Ordinary schools, Gaelscoileanna and Gaeltacht schools.

* A threshold of **17 pupils** will apply for the **retention** of the existing 2nd mainstream classroom teacher (i.e. P+1) Separately, a threshold of **15 pupils** will apply for the **appointment and retention** of the 2nd mainstream classroom teacher (i.e. P+1) for those schools situated 8km or more from the nearest school of the same type of patronage/language of instruction.

** A threshold of **51 pupils** will apply for the **retention** of the existing 3rd mainstream classroom teacher (i.e. P+2).

*** A threshold of **81 pupils** will apply for the **retention** of the existing 4th mainstream classroom teacher (i.e. P+3).

Appendix 3: Developing Schools Posts

The concept and criteria for developing schools were first established in 1989. Initially schools with 298 pupil enrolments or fewer, required a minimum 25 extra enrolments and an excess of 5 pupils over the next staffing schedule band. Schools with between 299 and 370 pupil enrolments required an extra 30 pupils and excess of 10 pupils over the staffing schedule band, while schools with more than 371 pupils required an additional 35 enrolments, and an excess of 15 pupils over the next threshold (Table A.3.1).

Table A.3.1: Developing School Criteria 1989

Enrolment 30 th September 1989	Minimum Numerical Increase Required	Stipulated Excess Number
Up to 298	25	5
299 – 370	30	10
371 and over	35	15

Source: Department of Education Circular 15/1989

During 2000/2001, the developing school criteria was simplified to only two criteria, schools below 298 pupils, and schools above 299 pupils, and made the excess enrolments equal at both thresholds. In 2006/2007 the criteria were simplified to require a minimum increase of 25 pupils and excess enrolments. It also established two exceptions, based on schools being sufficiently small and having 5 pupils in excess of the next threshold. In 2007/2008, further changes set out developing schools must have 5 pupils in excess of the next threshold, and introduced different enrolment increases depending on school size. Schools with fewer than 6 teachers needed an increase of 15 pupils and average class sizes of 27:1. Schools with 7 or more teachers required an increase of 25 pupils. This also reduced the derogation threshold for appointing a second post, from 49 to 48 projected pupils and reduced the projected growth from 25 pupils down to 15 pupils.

Since, there have been minimal changes to the developing posts criteria. The thresholds and minimum numerical increases remained at the same levels, but the average class size requirement changed between years, while the minimum projection for appointing a second post increased, from 48 in 2007 to 56 in 2014. Since 2014/2015, the criteria for developing posts remain largely unchanged.

Appendix 4: Post-primary Other Enrolment Based Posts

There are number of other categories included in the enrolment based allocation posts. These are outlined in table A.4.1.

Table A.4.1: Summary of Posts

Allocation			Details	Total Allocation in 19/20	% Change since 14/15
Home School	Community	Liaison (HSCL)	Allocation is provided to DEIS schools in respect of the HSCL	181	3
Chaplain			Each Community and Comprehensive school receives an allocation with respect to a chaplain.	156	0.6
Junior Programme (JCSP)	Certificate	Skills	An additional allocation of 0.25 WTE posts is granted for each group of up to and including 45 recognised pupils participating in the JCSP up to a maximum of 135 pupils.	112.75	7
Learning Support				20.5	0
Language Support (EAL)				51	
Lan Gaelige				55	
Small Schools				29.5	
Island Schools				7.5	
CO-ED Area	Single	Catchment		85	
School Co-Operation				8.1	

Source: Department of Education

Appendix 5: Staffing Schedule Changes 2014 – 2019

The staffing schedule has undergone a number of changes in the period of 2014-2019. These changes include the general average pupil number per teacher being reduced from 28:1 to 26:1, the introduction of retention for small schools in 2015 and the changing of retention thresholds for Gaeltacht schools. Retention allows schools to retain teachers they were previously allocated, if their enrolment numbers fall to below the appointment threshold number but above the retention threshold. For example, in 2019/20 ordinary schools that have a teaching principal and 3 mainstream class teachers (P+3) or fewer, can retain a teacher if their pupil numbers fall but are still above the retention threshold. Ordinary schools with an allocation above P+3 will lose a teacher if their enrolments fall below the appointment threshold as they do not have a retention threshold. The staffing schedules for DEIS schools have remained the same over the period of 2014 - 2019. The differences between the schedules each year can be seen in Table A.5.1 below.

Table A.5.1: Staffing Schedule Changes

Academic Year	Ordinary Schools General Average	Gaeltacht Schools General Average	Small School Retention	Gaeltacht School Retention
2014/15	28:1	28:1	No Retention	From P+4 to P+10
2015/16	28:1	28:1	Up to P+3	Up to P+10
2016/17	27:1	27:1	Up to P+3	Up to P+8
2017/18	27:1	27:1	Up to P+3	Up to P+8
2018/19	26:1	26:1	Up to P+3	Up to P+8
2019/20	26:1	26:1	Up to P+3	Up to P+8

Appendix 6: Making Changes to the Staffing Schedule

The staffing schedules were developed following the methodology used by the Teacher Allocations Section in the Department of Education when making changes to the staffing schedule. This method can be broadly outlined in a few steps:

- The gap between the thresholds on all schedules the same up to P+7, but the thresholds are moved by one pupil (+/- depending on how the schedule is being adjusted).
- For the middle section of the schedule, to get to a new threshold the general average of the schedule minus one is added. For example, if a schedule with a general average of 28:1 is being created than 27 will be the gap between the thresholds.
- From P+17 on, to get to a new threshold the general average of the schedule is added. For example, if a schedule with a general average of 28:1 is being created than 28 will be the gap between the thresholds.

Table A.6.1 provides an example of how a staffing schedule with a general average of 27:1 is changed to a staffing schedule with a general average of 26:1.

Table A.6.1: Changes to Staffing Schedule 2017/18 – 2019/20

	2017/18	General Average 27:1	2018/19	General Average 26:1
P + 1	19		18	Reduce by 1
P + 2	55		54	Reduce by 1
P + 3	85		84	Reduce by 1
P + 4	114		113	Reduce by 1
P + 5	144		143	Reduce by 1
P + 6	172		171	Reduce by 1
P + 7	177		176	Reduce by 1
	+26 to get next teacher (from P+7 to P+8)		+25 to get next teacher (from P+7 to P+8)	
P + 8	203	+26 to get next teacher	201	+25 to get next teacher
P + 9	229	+26 to get next teacher	226	+25 to get next teacher
P + 10	255	+26 to get next teacher	251	+25 to get next teacher
P + 11	281	+26 to get next teacher	276	+25 to get next teacher
P + 12	307	+26 to get next teacher	301	+25 to get next teacher
P + 13	333	+26 to get next teacher	326	+25 to get next teacher
P + 14	359	+26 to get next teacher	351	+25 to get next teacher
P + 15	385	+26 to get next teacher	376	+25 to get next teacher
P + 16	411		401	
	+37 to get next teacher (from P+16 to P+17)		+36 to get next teacher (from P+16 to P+17)	
P + 17	448		437	
P + 18	+27 to get next teacher (from P+17 to P+18)		+26 to get next teacher (from P+17 to P+18)	
P + 19	475	+27 to get next teacher	463	+26 to get next teacher
P + 20	502	+27 to get next teacher	489	+26 to get next teacher
P + 21	529	+27 to get next teacher	515	+26 to get next teacher
P + 22	556	+27 to get next teacher	541	+26 to get next teacher
	And so on: additional teacher for each 27 pupils		And so on: additional teacher for each 26 pupils	

