1. The Purpose

Early Years is the term employed for the period between birth and the age of six. The preschool year just before starting primary school is that part of Early Years provision which forms the focus of this paper. Free places in pre-school education are offered to all three-year-olds in Northern Ireland, prior to starting primary school. Funding is allocated to the child, which then goes directly to the provider. The aim is for the Department of Education “…to provide one year of non-compulsory pre-school education to every child in their immediate pre-school year whose family want it”.

Most parents take advantage of this offer for their children. Sometimes known as Early Childhood Education and Care (ECEC), this experience of education before formal schooling begins has been shown to considerably improve life chances and to be important in contributing towards the process of building a shared society. This briefing paper will examine pre-school provision in Northern Ireland, the degree to which that provision is fragmented and the factors which influence those divisions.

1.1 What are the benefits of early years education?

One international study showed that, at age 15, students who had received pre-primary school education for more than one year performed better, to the equivalent of an additional year of formal education, compared to those who went straight into primary school. While all children derive a benefit from ECEC, it is of particular advantage for children from disadvantaged socio-economic backgrounds.

Sure Start in Northern Ireland helps to provide that to children under the age of four, and their families, from areas with high levels of deprivation. One large-scale study in Northern Ireland reported beneficial effects from ECEC on learning in literacy and mathematics which lasted into primary school and subsequent years. This research concluded that “high quality pre-school is an important part of a nation’s infrastructure for education of the population and economic development”. Most Organisation for Economic Co-operation and Development (OECD) countries now have universal or near universal participation in ECEC, a significant move towards meeting one of the UN Sustainable Development Goals Education Targets.

The benefits of ECEC stem from the improvement it brings to young children’s social, emotional, cognitive and language development. The levels of skill and knowledge of the staff would appear to be crucial to the success of this intervention. Five components are said to be important in gaining those advantages:

- building trust, confidence, and independence;
- building social and emotional well-being;
- supporting and extending language and communication;
- supporting learning and critical thinking; and
- assessing learning and language.

When skilled staff adapt these components to cater for the needs of individual learners, the benefits for those children starting primary school are maximised. As much with early years provision, teachers in pre-schools and Nurseries use play in sophisticated ways to promote learning, an approach which requires high levels of expertise.

---

1. DENI Applying for a funded Pre-school place - 2020-21: https://www.education-ni.gov.uk/articles/applying-funded-pre-school-place-202021
2. Provision In Northern Ireland

2.1 Definitions

There are a range of terms associated with pre-school and Early Years provision.

### Definitions

<table>
<thead>
<tr>
<th>Pre-school</th>
<th>Early Years</th>
<th>Sure Start</th>
<th>Reception class</th>
<th>Nursery schools</th>
<th>Nursery Units</th>
<th>Day Nursery</th>
<th>Playgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>The year before primary school with non-compulsory funded education provision offered to all children.</td>
<td>The period from birth to six years old.</td>
<td>Targeted support for children under four years of age, and their families, from areas of need, promoting physical, intellectual, social and emotional development.</td>
<td>Class provided in a mainstream primary school for children aged four on admission, but who are not yet of compulsory school age i.e. with their fourth birthday after 1 July, available only if places remain after all children of compulsory school age have been allocated places.</td>
<td>Schools, independent of primary schools, which offer places mostly to three- to four-year-olds, but occasionally to children younger than three.</td>
<td>Units within primary schools, which offer places mostly to three- to four-year-olds, but occasionally to children younger than three.</td>
<td>Day nurseries are usually privately run and provide care for children aged from six weeks to five years old. They have to be registered and are inspected annually by Social Workers. If participating in the Pre-School Education Programme they have an allocation of funded places for which children in their final pre-school year can apply. Half of the staff must have a childcare qualification.</td>
<td>Playgroups offer short daily sessions of care and learning through play for children aged two to four years old and, if registered, are inspected annually by Social Workers. Registered playgroups participating in the Pre-School Education Programme have an allocation of funded places for which children in their final pre-school year can apply.</td>
</tr>
</tbody>
</table>

2.2 Pre-school provision

While pre-school attendance is not compulsory in Northern Ireland, it is seen as offering a smooth transition into primary school and has been developed so as to lead onto the Foundation Stage of the Northern Ireland Curriculum (Primary 1 and 2). The government’s commitment to provide a free pre-school year to every child whose family wants it resulted in 92% of all three-year-olds taking up a pre-school place in 2018/19.

Figures provided through a complex network of statutory, voluntary and private providers across Northern Ireland (Figure 1 and Table 1). The voluntary pre-school sector includes provision which is run by community groups, management committees or charities and these, alongside private providers, comprised almost half of the 771 pre-school units in 2018/19. Some children attend specialist nursery schools, while others attend nursery units attached to primary schools. Reception classes are effectively the first year of primary school but can accept younger children. Considered a less effective form of pre-school provision, they are reducing in number. Of the 806 primary schools across Northern Ireland in 2018-19, only 45 had a reception class. Other pre-school provision available to parents includes unfunded childminding; all childminders registered with their local Health and Care Trust are subject to inspections. In addition there are an unknown number of unregistered childminders. A study in England from some years ago suggested that, for every registered childminder, there were 16 who were unregistered; it is not possible to know or to monitor the quality of that care.

![Figure 1: Early Years Education and Care: support from birth to 6 years (2018/19 figures)](image-url)
There are many differences across funded pre-school provision. For instance, while all staff need to be qualified, specific qualification requirements vary from sector to sector. For voluntary and private providers, at least 50% of staff must have an education or relevant childcare qualification and providers should be working towards all staff having a relevant qualification within their first year of employment. They are also "...required to access support from a qualified teacher or early years specialist to assist with raising standards of provision". Currently the responsibility for Early Years education and childcare is shared across a number of government departments and arm's length bodies in Northern Ireland, despite recommendations that it be brought together under one government minister in order to ensure "greater coherence and consistency in regulation, funding and staffing, enhanced continuity for children ...and improved management".

All funded pre-school settings are inspected by the Education and Training Inspectorate in the same way as schools. However, those aspects deemed ‘care’ are the responsibility of the local Health and Care Trusts, and their Social Workers inspect centres annually. All voluntary and private providers, if they are to receive funding, must be registered by their local Health and Social Care Trust.

Table 1: Funded pre-school enrolments 2018/2019

<table>
<thead>
<tr>
<th>Settings</th>
<th>Management</th>
<th>Number of Units</th>
<th>Number of Pupils</th>
<th>Protestant</th>
<th>Catholic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school centres with funded places (Playgroups and Day Centres)</td>
<td>Voluntary</td>
<td>331</td>
<td>6893</td>
<td>1783</td>
<td>3349</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>55</td>
<td>1129</td>
<td>373</td>
<td>323</td>
</tr>
<tr>
<td>Nursery schools</td>
<td>Controlled</td>
<td>64</td>
<td>4111</td>
<td>1833</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>Catholic Maintained</td>
<td>31</td>
<td>1721</td>
<td>32</td>
<td>1475</td>
</tr>
<tr>
<td>Funded nursery units in primary schools</td>
<td>Controlled</td>
<td>119</td>
<td>4531</td>
<td>2286</td>
<td>556</td>
</tr>
<tr>
<td></td>
<td>Catholic Maintained</td>
<td>90</td>
<td>3899</td>
<td>62</td>
<td>3682</td>
</tr>
<tr>
<td></td>
<td>Other Maintained</td>
<td>16</td>
<td>473</td>
<td>39</td>
<td>386</td>
</tr>
<tr>
<td></td>
<td>Controlled Integrated</td>
<td>4</td>
<td>103</td>
<td>33</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Grant Maintained Integrated</td>
<td>16</td>
<td>548</td>
<td>154</td>
<td>211</td>
</tr>
<tr>
<td>Primary schools with funded Reception classes</td>
<td>Controlled</td>
<td>13</td>
<td>46</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>Catholic Maintained</td>
<td>29</td>
<td>105</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>Controlled Integrated</td>
<td>2</td>
<td>17</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>771**</td>
<td>23,576</td>
<td>6,595</td>
<td>11,264</td>
</tr>
</tbody>
</table>

* These figures include Reception ** The subtotals do not add up as some schools have both Reception and Nursery classes.
*** The religious breakdown of reception classes is unavailable individually, only whole school figures.

In 2018/19, there were 386 voluntary and private pre-school centres in Northern Ireland, and 95 nursery schools, of which 64 were in the Controlled and 31 in the Catholic Maintained sector. Altogether, funded pre-school education catered for 23,576 children in 2018/19, an increase of 76 over the previous year. The sector includes 43 pre-school Irish Medium Education (IME) settings catering for 885 funded places for pupils in 2014/15, increasing to 965 in 2018/19. In 2014/15, most (29) of the 43 settings were voluntary or private settings; of the 14 statutory IME schools, two were Catholic Maintained and the remainder (12) were Other Maintained. In 2018/19, there were 668 pupils enrolled in pre-school provision in the Integrated sector, of which most (651) were in Nurseries and the remainder in Reception classes.

2.3 Religious composition

The main aim for pre-school education in Northern Ireland, as elsewhere across the world, is to achieve improvements in children’s personal learning and wellbeing in order to improve eventual educational outcomes. However, in Northern Ireland, there is a supplementary aim of promoting positive co-operation between children regardless of their gender, religious community background, nationality or ethnicity, and regardless of whether they have a disability. The Northern Ireland Executive advocate “…accessible, affordable and universal childcare [as] a contributory step towards consolidating a united, post-conflict society”. It is, however, conceded that diversity in intake and staffing is a longer-term aspiration, and that the promotion of sharing and diversity is what is required as a minimum. While some argue that “early years educators are a vital part of the process of fostering respect for diversity and building peaceful communities”, there is an acknowledgment that “inclusion is difficult to achieve in a society that has been historically divided”.

Most educational provision in Northern Ireland is segregated by religion, but there is a perception that “pre-school provision tends to be religiously and ethnically inclusive”. It has been said that “unlike the compulsory school system, which is organised along denominational lines in Northern Ireland, pre-school education in all settings is accessible to children from all backgrounds.”
While it could be argued that all schools in Northern Ireland are technically accessible from either community, in practice pupils in most primary and post-primary schools are segregated. On the other hand, pre-schools are often thought to be different and it has been argued that “…early years settings in Northern Ireland are not normally attended solely by one community or other”, although these writers acknowledge that the degree to which pre-school provision is mixed “…is impacted by location”. 

22 Presumably, in places where populations are overwhelmingly from one community, there is much less chance of having mixed pre-school provision. However, other sources hint that, even in mixed areas, pre-schools may tend to segregate. A concern was voiced that “…in small communities, viability is an issue when a [pre-school] group [which] is provided by the majority community of the area… will not be attended by the local minority community”. 

23 One writer, examining the workforce in ECEC, reflects on the strong tradition of parent- and community-run pre-school groups in Northern Ireland and, because of segregated residential patterns, notes that “…community groups have tended to reflect that pattern, although services run by the big voluntary organisations have tried to stand out against replicating divisions in staff recruitment”. 

24 Where one community dominates in an area, with the pre-school provision co-located in the local primary school reflecting that community, the minority community of that area may choose not to send their children there. An explicit objective of pre-schools is that they are “…shared across all communities [to] enable us to build and consolidate peace”. 

25 If there were to be extensive segregation in pre-school settings, this would limit the opportunities to achieve this.

2.4 Noticing Differences

As one of the aims of pre-school provision in Northern Ireland is to help to build a united community, some sense of when young people start to notice difference would be useful. Awareness of difference in race and ability has been widely observed in pre-school children and, as more parents work and children are cared for away from their homes, there is a particular need for pre-school provision to help to develop positive attitudes to diversity. It has been noted that changes in attitudes to minorities can be observed in very young children. When as young as two years old, they start to recognise racial differences and, from three years, begin to show ethnic prejudices based on that recognition. 

27 Knowledge about certain cultural stereotypes around gender and preference for peers of their own gender appears between the ages of two and three. 

28 A study with three- to five-year-old children indicated that “this early period of childhood is critical in the development of intergroup attitudes”. 

29 Research with Jewish children in Israel found that they are able to distinguish themselves from ‘an Arab’ when two and a half to three years old. From this age, the term ‘Arab’ starts to produce a negative connotation in these Jewish children, even though they know little about Arabs at this stage. 

30 This would suggest that “…the basis for the social institution of prejudice is in place early in social development”. 

In Northern Ireland, some research suggests that, in general, prejudiced statements about the other community only start to emerge in five-year-old children and, after that, awareness increases ‘exponentially’. In one study with six-year-olds, 15% made prejudiced statements about the other community without prompting. 

32 However, other research has suggested that Catholic and Protestant children were starting to understand the ethnic divisions around them from the age of three, and beginning to display negative attitudes to the other community. 

33 A preference for particular cultural events and symbols associated with their community has been shown from the age of three, with an awareness of their significance displayed by 51% of three-year-olds. 

34 Another study, looking at three- to eleven-year-olds concluded that cultural events and displays helped to instill awareness of division and of ‘otherness’. 

35 Some Northern Ireland research emphasises the need to address “…issues of diversity and inclusion within the early years due to the fact that children begin to show awareness from a very young age, …[and]…the role of early years practitioners is pivotal in supporting children and families and ultimately building a brighter future to live in a peaceful society”. 

36 There remains the challenge of how pre-school practitioners address these differences. Much research concludes that intergroup bias can be reduced through contact with other groups. 

37 A study with young children concluded that their reaction to racial differences reflects “…the attitudes of individuals who populate their social environment…” which may be a further challenge in a society largely segregated by residence as well as in educational provision.
2.5 Pre-school Enrolment Analysis

Before the end of March in each academic year, all schools, including all nursery and all voluntary and private providers with funded pre-school pupils, must complete an annual school census. This records, among other things, the religion of the pupils, allocating them to one of 13 categories (Table 2) for return to the Department of Education. When the Department of Education publishes summary data at school level, only Protestant and Catholic numbers are provided as separate categories; all other religions, and none, are collapsed into a single category: Other Christian/non-Christian/no religion/unknown. These data will be used to analyse segregation levels in pre-schools in Northern Ireland.

Table 2: Religion Categories on the DENI Census for schools

<table>
<thead>
<tr>
<th>Religion Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahai</td>
</tr>
<tr>
<td>Buddhist</td>
</tr>
<tr>
<td>Hindu</td>
</tr>
<tr>
<td>Jewish</td>
</tr>
<tr>
<td>Jehovah Witness</td>
</tr>
<tr>
<td>Other Christian</td>
</tr>
<tr>
<td>Muslim</td>
</tr>
<tr>
<td>Sikh</td>
</tr>
<tr>
<td>Protestant</td>
</tr>
<tr>
<td>Roman Catholic</td>
</tr>
<tr>
<td>Church of Jesus Christ of Latter Day Saints</td>
</tr>
<tr>
<td>No Religion Recorded / Religion Unknown</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Data on enrolments (2018-19) for pre-school providers were obtained from the Department of Education\(^{40}\) and then linked to location data from the Northern Ireland Neighbourhood Information Service\(^{41}\) to allow spatial analysis using Geographical Information System (GIS) software. This analysis also made use of data on settlements\(^{42}\) and population.\(^{43}\) Data on religion are available for pre-schools and nursery schools, but not for individual nursery units or reception classes within primary schools, as these are only released at school level (thus including P1 to P7), and so these had to be excluded from the analysis.

The enrolment data includes the count of children by religion for each pre-school, but data may be withheld in some cases (where the number of pupils is less than five and considered sensitive, and under rules of disclosure). For this reason, only 55% of the pre-school data for 2018-19 is complete. There is a much more complete set of data for 2016-17 and a complete dataset for 2014-15, but these are several years out of date. Withheld data are most likely to affect schools that are strongly segregated, rather than those that are entirely segregated or more evenly mixed, and instead of introducing bias to the analysis by excluding these pre-schools entirely, values were estimated to replace those that had been withheld. This was achieved by substituting a value of three for counts that are indicated as being between one and four; withheld data were estimated accordingly. Comparison with the earlier, more complete, datasets supports the validity of this method, whereas exclusion of the suppressed data incorrectly exaggerates the extent of segregation. By this means, access to a dataset which was geographically complete and up-to-date was possible.

The figures were used to calculate a score\(^{44}\) for each pre-school to indicate the degree of segregation or mixing of children recorded as Catholic and Protestant. Since the focus of the analysis is the extent to which children from these two communities have the opportunity to mix in the pre-school setting, the religious category ‘Other’ was omitted from the score. The 14% of pre-schools which apparently have neither Catholic nor Protestant children enrolled (i.e. all children recorded as ‘Other’) are therefore not included in the analysis (this ranges from 1% of nursery schools to 31% of day nurseries). Scores range from 0 (indicating a pre-school that has an equal representation of both communities) to 1 (a segregated pre-school that is attended by children of one community rather than both). Scores between these two extremes indicate the extent of mixing or segregation; so, for example, a score of 0.8 indicates a pre-school with very uneven representation, in which one community dominates with 90% of the enrolled children, while a pre-school with 60% of children from one community and 40% from the other would have a score of 0.2.

3. Results

3.1 Segregation

Despite research suggesting that pre-school provision is generally mixed, this study indicates a high degree of segregation, shown by the frequency graph (Figure 1). 16% of pre-schools have scores indicating relatively low segregation of Protestants and Catholics (up to 0.33, meaning that the number of children in a pre-school from the larger community is no more than twice that of the smaller one) and a further 15% are pre-schools in which the larger community is between two and four times the size of the smaller (scores from 0.34 to 0.6). The remaining 69% are more strongly segregated, and 47% are entirely segregated, i.e. attended only by children of one community (indicated by the strong peak to the right of the graph). For comparison, Figure 2 shows the equivalent segregation scores for primary schools in Northern Ireland, a sector known to be highly segregated. While a smaller proportion of primary schools have scores indicating low to moderate segregation (with only 10% having scores of 0.6 or below), they also have a smaller proportion that are completely segregated (39%).

\(^{40}\) https://www.education-ni.gov.uk/articles/school-enrolments-school-level-data \(^{41}\) http://www.ninis2.nisra.gov.uk \(^{42}\) https://www.nisra.gov.uk/support/geography/urban-rural-classification \(^{43}\) 2011 Census data is available at https://www.ninis2.nisra.gov.uk. \(^{44}\) The score is calculated as \((M-N)/(M+N)\), where \(M\) and \(N\) are the numbers of children identified as Catholic and Protestant respectively.
Residential segregation in Northern Ireland is well documented, and many people live in areas which are dominated by people from their community. In consequence, services are often just as divided between communities. It is possible that pre-schools are no different, and that communities tend to use their local pre-school provision which becomes segregated by default. However, a small number of instances were found, particularly in Belfast but not confined to there, where pre-school provision attended mainly by one community was located in an area dominated by the other community. These schools were still used almost entirely by the minority community, while neighbours from the majority community presumably used other pre-schools some distance away. It would appear that, even though pre-schools are readily accessible to either community, most parents make the choice to send their three-year-old children to pre-schools which reflect the community with which the parents self-identify. On the other hand, there are also a number of instances of pre-schools with low levels of segregation located within areas that are relatively segregated in residential terms. On the whole, however, pre-schools are more segregated than the areas in which they are located and, even in areas that are relatively mixed, more than 40% of pre-schools are strongly segregated. Across Northern Ireland, well over 50% of pre-schools are more segregated than the areas within which they are located, and only 20% are less segregated than the surrounding community.

It was surmised that pre-school provision located within the grounds of an existing Maintained or Controlled primary, as many seem to be, would be likely to have higher levels of segregation. Superficially, segregation levels are similar in pre-schools that are co-located with a primary school and those that are not but the proportion of entirely segregated pre-schools co-located with a primary school is higher at 65%, compared to 42% of those that are located at least 150 metres from their nearest primary school. A comparison with pre-school provision categorised as ‘playgroups within a school’ and ‘playgroups not in a school’ (Figures 3 and 4) produces very similar findings: pre-school settings located in a primary school are more likely to be totally segregated, compared to those that are not located within a school.

---

45 of 481 (18.5%) pre-schools out of 481 (18.5%) are exactly co-located with a primary school, even though 6 of these are described as “playgroup not in a school”. Another 13 are within 50 metres of a primary school.
3.2 ‘Cross-Community’ pre-school provision

A relatively large proportion (17%) of voluntary and private pre-school providers include ‘Community’ in their name. It is not clear whether that is intended to signify the community local to the provider or the Northern Ireland community as a whole. A smaller proportion (just over 4%) of pre-school providers explicitly declare their ambition to be cross-community – incorporating that term in their name. Of those 17 voluntary and private pre-school providers which include “Cross Community” in their title in 2019-20, only five show evidence of having achieved that to some degree; two of those have very mixed enrolments. On the other hand, two providers listed 100% of their enrolment as “Other Christian/non-Christian/no religion/unknown”, and another two have 100% enrolment from just one community. This, alongside data from previous years, would suggest that even pre-school providers explicitly striving for cross-community enrolment as indicated by the name given to their unit, generally fail to achieve that.

3.3 Settlement size

Settlement size was examined as a variable to investigate whether smaller settlements were less likely to have segregated pre-school provision, and there did seem to be some indication this was the case. Primary schools and pre-schools both tend to be highly segregated in the largest settlements, but there are lower levels of segregation in pre-schools in smaller settlements (whether because of their limited size or because they have been established more recently) being, on average, less segregated than the primary schools in the area. Interestingly, pre-schools and primary schools both have higher average segregation scores in what is defined as “Open Countryside” than in towns and villages, even though residential segregation within the wider community in these areas tends to be lower, on average, than that in most other types of settlement. These are areas of dispersed housing, farming communities and occasional hamlets, with no sizable settlements. Small Area Census data suggests that residential segregation is low in open countryside (it is highest in the cities of Derry/Londonderry and then Belfast), so more research would be required to ascertain why segregation scores in pre-school settings are higher there.

4. Conclusion

In 2018/19, 92% of children across Northern Ireland attended pre-schools. Despite perceptions that these are generally mixed, almost 70% of the pre-schools are highly segregated and 47% are entirely segregated. The data used in this research covers approximately 60% of preschool provision as the religious breakdown is not available separately for nursery units and reception classes in primary schools. However, it is likely that segregation levels in these classes are more similar to segregation in primary schools and excluding them from the analysis will not have exaggerated the degree of pre-school segregation. Similarly, estimating withheld values does not artificially increase segregation scores, and excluding those schools with withheld data would actually show higher average segregation scores than those described here.

The governance of pre-school provision reflects Northern Ireland’s complex and divided education system. Responsibility for Early Years provision is shared by a number of departments and arm’s-length bodies which “...has pointed to a fragmented policy approach, highlighting a ‘lack of leadership and ownership’ in terms of no one Government Department having sole responsibility for provision”.46 The fragmented nature of pre-school education in Northern Ireland has produced a system with many types of provision and multiple oversight from a range of bodies.

Structural issues such as these can be addressed. However, it may be more difficult to tackle religious segregation in pre-school provision. The widespread segregation of schools in Northern Ireland is well known and “…93% of pupils...are significantly separated according to ethnic identity”.47 This has been known to affect children and young people from four years of age (Northern Ireland has the lowest age of entry to primary education in Europe) to 16/18 years. Providing opportunities for an additional year’s education, albeit not compulsory, will mean, for most children in Northern Ireland, that they will be segregated along religious lines from the age of three, a division which potentially continues for 15 years.

It has been recognised that pre-school enrolments might reflect the community in which they are found but, over time, there was a hope that these settings could have an increasing role in embracing diversity and building peaceful communities. Challenging community divisions is difficult, even if there were a political will to do so. The degree of segregation in the pre-school sector highlighted in this research would suggest that community divisions are at least as apparent in pre-schools as they are elsewhere in education, and there are few indications of that changing. While there is evidence that noticing the differences between communities is not fully developed in three-year-olds, research suggests that it is important to develop positive attitudes to inclusion at that age and to ensure that diversity, including the divided communities in Northern Ireland, is something to be welcomed and not feared by pre-school aged children. With a largely segregated pre-school sector, it will be challenging for staff in those units to achieve that.
