Composite classes

Summary

In October 2016 the Minister for Education suggested that it is more difficult for teachers to deliver high quality education in composite classes and stated that, by the end of the planning period, he expected actions to address ‘the issue of primary pupils being taught in a composite class of more than two year groups’. This briefing paper discusses composite classes in Northern Ireland and in other jurisdictions.

Policy

The Department does not have a specific policy on composite classes, although the sustainable schools policy includes indicators around having no more than two composite year groups in a single classroom, and at least four teachers in a school.

Composite classes in Northern Ireland

In 2015/16, more than half of primary schools (59%) in Northern Ireland had composite classes. There were a total of 1,326 composite classes in primaries, of which the majority (87%) were made up of two year groupings.

As might be expected, most (89%) of the schools with composite classes comprising more than two year groups are situated in rural areas, and these are widely spread geographically across Northern Ireland.
Catholic maintained schools are disproportionately represented, making up more than half (52%) of the schools that have composite classes consisting of more than two year groups, compared to the 39% that are controlled schools.

**Attainment in composite classes**

The Assembly’s Research and Information Service requested Key Stage 1 and 2 assessment data from the Department of Education. However, the Department advised that it did not hold the requested data separated by composite classes.

The *Chief Inspector’s Report 2014-16* stated that it is more difficult for a teacher to ensure adequate progression in composite classes of more than two year groups. While the wider research on composite classes is not strongly conclusive, in general, studies have not found significant differences in student outcomes between composite and single-grade classes. There is, however, agreement in the literature that multi-grade teaching is more demanding for teachers.

**Professional development**

There is evidence that teachers of composite classes require adequate training and support to ensure optimum outcomes for their students. However, the Education Authority does not provide any specific training to teachers of composite classes on teaching strategies.

**International practice**

Composite classes are prevalent internationally, with around 30% of the world’s primary school children estimated to study in them. Around the world teachers of such classes tend to employ a range of teaching and learning strategies in order to support all learners in their classroom.

**Conclusion**

Composite classes are prevalent both in Northern Ireland and around the world. While the evidence is not strongly conclusive, research does not tend to find significant differences in outcomes. Areas for further consideration could include:

- The evidence base for the objective of taking actions to address composite classes of more than two year groupings;
- The implications of any actions to reduce composite classes with more than two year groupings from a rural proofing perspective, and taking into account the higher proportion of Catholic maintained schools within this cohort;
- The lack of specific training opportunities for teachers of composite classes in Northern Ireland; and
- Practice in other jurisdictions, for example, teacher training on composite class management.
1 Introduction

A composite class refers to a setting where a single teacher has responsibility for two or more years, or grades, of students at the same time. Different countries use a range of terms for such classes, including mixed-year or multi-grade teaching. Mixed-age classes have a long and established history in schools.

This briefing paper considers composite classes in Northern Ireland, discusses the evidence on attainment and other outcomes within composite classes, and provides examples from other jurisdictions.

2 Background

On the 17th October 2016 the Minister for Education, Peter Weir MLA, launched a draft area plan. He stated that primary school pupils should be in a class with no more than two year groups, but ideally in single year group classes.

The Minister suggested that pupils needed to be able to interact with peer groups, and that it is more difficult for teachers to deliver a high quality education in composite classrooms. He stated:

By the end of the planning period I expect actions to address the issue of primary pupils being taught in composite classes of more than two year groups. Ideally I would like to see communities with a vibrant sustainable primary school where each pupil is in a class with a single year group.

3 Policy

The Department of Education (the Department) does not have a policy on composite classes, noting that it is a matter for each school’s principal and Board of Governors to determine individual class sizes and arrangements (taking into account budget, staffing and health and safety considerations).

Sustainable schools policy

The Department of Education’s 2009 Schools for the Future: A Policy for Sustainable Schools suggests that small primary schools can face particular challenges in delivering high quality education, with demanding staff workloads and small enrolments.

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5 Information provided by the Department of Education, December 2016
6 Department of Education (2009) Schools for the Future: A Policy for Sustainable Schools Bangor: Department of Education
The sustainable schools policy suggests that other challenges small schools may face include reduced opportunities for professional interactions, more limited teacher specialisms and extra-curricular activities. The policy asserts that these challenges can become greater when:  

- **There are composite classes containing more than two age groups** (likely when there are fewer than four teachers, including a teaching principal); and  
- **There are only two teachers;** one has responsibility for four different age groups, and the other for three age groups (one of the teachers will be a teaching principal).

The policy’s criteria include ‘quality educational experience’ and ‘stable enrolment trends’, and the indicators include having no more than two composite year groups in a single classroom, a minimum of four teachers at primary and at least seven classrooms, with a minimum enrolment of 140 in urban areas and 105 in rural areas.  

*Criticism of the policy and its implementation*  

However, in February 2016 the Assembly’s Public Accounts Committee noted that while the criteria within the policy aimed to ensure transparency, consistency and equity in decision making: ‘*this has not happened and needs to be addressed*’. Further, it highlighted ‘*fundamental flaws*’ in the Department’s calculation of surplus places, suggesting that this presented a poor basis upon which to implement a key policy.

4 Composite classes in Northern Ireland  

In Northern Ireland in 2015/16, 488 primary schools had composite classes; making up more than half (59%) of primary schools. Figure 1 below illustrates the number of composite classes within each of these schools. It shows that these schools most commonly had three composite classes (44% of the schools with composite classes).
In 2015/16 there were 1,326 composite classes in Northern Ireland primaries. As Figure 2 illustrates, the majority (87%) of these classes comprised two year groupings. A total of 176 composite classes consisted of more than two year groupings. Five of these comprised four year groups, while two were made up of five classes and one consisted of the entire school.¹⁴

Figure 2: Composite classes in Northern Ireland in 2015/16: organisation of classes¹⁵

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¹³ Information provided by the Department of Education, December 2016. Includes reception classes and preparatory schools
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¹⁵ Information provided by the Department of Education, December 2016. Figures include reception classes and preparatory schools
Profile of schools with composite classes comprising more than two year groupings

Analysis of the 2015/16 data shows that the majority (89%) of the schools that have composite classes made up of more than two year groupings are situated in rural areas, with the remaining 11% in urban areas.\(^{16}\)

Over half (52%) of schools with composite classes consisting of more than two year groupings were Catholic maintained schools (69 schools), compared to 39% that were controlled schools (52 schools). In the wider school population Catholic maintained and controlled schools each make up around 45% of schools. Figure 3 overleaf illustrates these findings.

It also shows that a small proportion of these schools were other maintained schools, including Irish-medium schools (six schools or 5%) and controlled integrated schools (five schools or 4%).

**Figure 3: Management type of schools with composite classes more than two year groupings, 2015/16**

Number and location of composite classes comprising more than two year groupings

A total of 133 primary schools in Northern Ireland (16% of all primary schools) have at least one composite class that comprises more than two year groupings.\(^{17}\)

Figure 4 overleaf illustrates the location of all primary schools in Northern Ireland that have composite classes made up of more than two year groupings. It shows a wide geographic spread of such schools.

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\(^{16}\) Data provided by the Department of Education, December 2016. Includes reception classes and preparatory schools

\(^{17}\) Data provided by the Department of Education, December 2016. Includes reception classes and preparatory schools
5 Educational attainment in composite classes

Chief Inspector’s Report

The Chief Inspector’s Report 2014-16 reported inspection evidence on schools with composite classes. The findings included:18

- Within a **composite class of two primary year groups**, teachers can cater for all children effectively and they can make good progress;

- Within **composite classes spanning more than two year groups**, it is more challenging for the teacher to ensure adequate progression in learning and plan to meet individual needs across the wider range of abilities. This may also limit opportunities for social and emotional development with peers.

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Attainment in composite classes in Northern Ireland

The Research and Information Service (RaISe) asked the Department of Education to provide assessment data on Key Stages 1 and 2 in composite classes, including according to the composition of the class (i.e. the number of year groups in the class and the nature of the groupings).

However, the Department advised that it does not hold the requested Key Stage information separated by composite classes; potentially raising questions around the evidence base on composite classes.

Wider research

While the body of research is not strongly conclusive, generally studies have not found significant differences for student outcomes between composite and single-grade classes.\(^\text{19}\) Further, some authors have suggested that the quality of teaching is a more important factor than class groupings.\(^\text{20}\)

Composition of multi-grade classes

Although a prevalent practice around the world, there is little research on the composition of multi-grade classes (for example, outcomes for classes with two year groups compared to those with three or more grades).\(^\text{21}\)

However, a recent study of 857 schools in the Republic of Ireland found that, after controlling for other factors such as child and family characteristics, the composition of multi-grade classes was not associated with reading or maths test scores. As such, outcomes for children in multi-grade classes, including those with both older and younger children, were not significantly different from those in single-grade classes.\(^\text{22}\)

This is supported by a US study (with almost 10,000 children), which found strong evidence that children in their first year of primary school in a composite class perform no better or worse than their counterparts in single-year classes.\(^\text{23}\)

However, a study in Norwegian lower post-primary schools (with almost 10,000 pupils) found that on average, students in composite classes performed slightly better (a small but significant effect) than their peers in single-grade classes, as a result of sharing a

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class with more mature peers. Nonetheless, participating in a class with younger children appeared to lower achievement.\(^{24}\)

It concluded that pupils can benefit from composite classes, but that the balance of higher and lower grades is important. It found that pupils could be worse off if schools are unable to counter the negative effects of lower grades with the positive effects of higher grades.\(^{25}\)

**Benefits and challenges in relation to educational outcomes**

Research has identified a number potential benefits of composite classes for young people in regard to educational outcomes. These include:\(^{26}\)

- **Gains for low-achieving children** through factors such as continuity of education and smaller class sizes;
- **Gains for younger children** through exposure to more advanced materials, role models to emulate and through social support from older peers;
- **Gains for older children** through revising subject content, leadership skills and independent learning skills; and
- **Gains for high-achieving children** through more challenging, independent learning.

However, the evidence also points to challenges or disadvantages, mostly around accommodating the wide range of pupils within the class and time constraints. There is general agreement in the literature that multi-grade teaching is more demanding for the teacher than single-grade teaching.\(^{27}\)

The teacher may have to ensure that they provide appropriate material for the range of pupils, meet their emotional needs and ensure there is no ‘pecking order’. The challenges and disadvantages include:\(^{28}\)

- **Curriculum organisation**: teachers face challenges covering two or more areas of the curriculum;


• **Ability range:** providing high quality teaching for all, from low achievers within the younger age group to high achievers in the oldest age group;

• **Assessment:** accommodating assessment for one or more of the age groups while continuing to teach the other children can be challenging;

• **Time:** teachers can experience challenges finding sufficient time to work with each grade and individuals;

• **Older and weaker students losing out;** and

• **Increased workload** for teachers.

**Challenges for classes with three or more grades**

Research in the Republic of Ireland in 2005 considered teaching approaches to classes with four year groups, although it did not provide a comparison with other composite class groupings or single-grade classes. The findings included:

- Children spent a large proportion of time working at their desk **without teacher attention**;

- **Teachers employed a variety of approaches**, including all grades together, two grades together, separate grades and peer tutoring; and

- **Teaching approaches varied according to subject:** teachers were more likely to teach all grades together for drama, arts, music and physical education, and more likely to teach maths to individual year groups.

Evidence from isolated alpine regions in Austria and Switzerland indicates that classes with three or more grades placed particular pressure on teachers with less experience. Teachers reported particular challenges in planning lessons for three or more year groups at the same time, with some noting that they could spend only a few minutes with each year group during a lesson.

Evidence suggests that long spells of ‘silent work’ without teacher assistance can have negative effects for student learning, such as boredom. Nonetheless, a potential advantage of this relates to pupils helping each other to carry out tasks, although this, too, can be can put a strain on the pupil helpers.

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6 Other outcomes

The Chief Inspector’s Report suggested that classes spanning two or more age groups may limit social and emotional development opportunities with peers.\textsuperscript{33} Among the wider evidence on composite classes, there is limited research on the non-cognitive outcomes, and existing research is generally inconclusive.\textsuperscript{34}

Nonetheless, the research does highlight potential benefits or opportunities for children within a mixed year class, including behavioural role models for younger children and opportunities for development through peer tutoring.\textsuperscript{35}

However, 2014 research in the Republic of Ireland found that children in mixed classes with older peers tended to have a more negative view of their own abilities, even after controlling for factors such as school mix, teacher experience and class size. It appears that having older peers as a reference group caused younger children to believe that they should be doing work at the same level.\textsuperscript{36}

The study also found that younger children in composite classes had a lower perception of their own popularity compared to those in classes with a single age group. However, this was not the case for pupils mixed with younger children, or with both younger and older children. There were also differential findings by gender, suggesting complex dynamics at play within composite classes in relation to wider, social outcomes.\textsuperscript{37}

7 Teacher training and professional development

Research points to a lack of specific focus on composite classes in both initial teacher education and continuing professional development across a number of jurisdictions, including in the UK, the Republic of Ireland and Nordic countries.\textsuperscript{38} The evidence indicates that teachers must receive adequate training and support in order to ensure that students benefit within composite classes.\textsuperscript{39}

\textsuperscript{33} Education and Training Inspectorate (2016) \textit{Chief Inspector’s Report 2014-16} Bangor: Department of Education


\textsuperscript{39} Mariano, L.T., Nataraj Kirby, S. (2009) \textit{Achievement of Students in Multigrade Classrooms: Evidence from the Los Angeles Unified School District RAND Education
Research suggests that some teachers of mixed-age classes would like further professional development in this regard. A study in the Republic of Ireland found a higher take-up of continuing professional development among teachers of multi-grade classrooms compared to those teaching a single year group. It suggests that this reflects a greater need for support in meeting the demands of the composite classroom.

The Education Authority, which has statutory responsibility for providing continuing professional development, does not provide any specific training to teachers of composite classes on teaching strategies.

### 8 Practice in other jurisdictions

Composite classes are not unique to Northern Ireland; indeed, one study estimates that around 30% of the world’s primary school children study in mixed age classes.

Typically, composite classes exist through necessity rather than choice, although in some cases they exist by design (for example, in Colombia).

This section provides a number of international examples, considering how schools and teachers attempt to accommodate composite classes.

**Colombia: Escuela Nueva**

The Colombian New School programme (Escuela Nueva) employs a participatory approach, with communities and parents closely involved in schooling, within a rural-orientated curriculum. Around 20,000 (of almost 30,000) rural public schools follow this model.

The primary schools generally have one or two teachers for the five-year primary cycle. The model often uses older students to support their younger peers as well as parent volunteers. Key features include:

- **Pupils progress at their own pace** through small group and individual work;
- **Pupils use self-instructional learning guides** in key subjects to direct individual and group work (accompanied by teacher guides);

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- **Classroom set-up** facilitates multi-grade schooling;
- **Teachers receive training** on areas including teaching a composite class (group management and simultaneous use of curricula); and
- New Schools are **designed to be resources for the community**.

**England: varied teaching processes**

Research indicates that multi-grade teaching is relatively common in England, and exists in both rural and urban areas. Teachers adapt their instruction in composite classes in different ways, including through: 47

- **Differentiation**: following one curriculum framework while tailoring tasks according to pupil ability;
- **Integrating frameworks**: integrating two single-year frameworks into one by matching topics or objectives; and
- **Use of two-year cycles**: developing a two-year cycle for one or more subjects.

**Finland: varied teaching practices**

Composite classes are prevalent and long-standing in Finland; in 2012-13 of primary schools, 16% were multi-grade classes. Research has found that teaching practices vary widely by teacher, subject and context, although there are some common teaching practices, summarised in Table 1 overleaf. 48

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### Table 1: Overview of key strategies for teaching composite classes in Finland

<table>
<thead>
<tr>
<th>Practice</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-class teaching</td>
<td>• Whole class learns together, using the same materials</td>
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<tr>
<td></td>
<td>• Often used for science, religion and art</td>
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<td></td>
<td>• May cause challenges for pupils beginning at the higher grade</td>
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<td></td>
<td>• Teacher must identify and address knowledge gaps</td>
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<tr>
<td>Parallel curriculum</td>
<td>• Both grades learn the same subject, but have different assignments</td>
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<tr>
<td></td>
<td>• Often used for maths and native language</td>
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<tr>
<td></td>
<td>• Challenges include keeping all pupils busy and minimising disruptive</td>
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<tr>
<td></td>
<td>behaviour</td>
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<tr>
<td>Guided peer tutoring</td>
<td>• Teacher guides tutoring between pupils</td>
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<td></td>
<td>• Rationale varies from acting as an extra activity for those who have</td>
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<tr>
<td></td>
<td>completed a task to asking older students to help younger pupils</td>
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<tr>
<td>Differentiating</td>
<td>• Teachers differentiate tasks and interventions according to the needs</td>
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<tr>
<td></td>
<td>of different learners</td>
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<tr>
<td></td>
<td>• Examples include giving talented learners extra assignments and</td>
</tr>
<tr>
<td></td>
<td>struggling students learning aids</td>
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</tbody>
</table>

### Republic of Ireland: high prevalence of composite classes

At primary level one in three children in the Republic of Ireland are in a composite class. In total, almost a quarter (24%) of pupils were in consecutive classes (comprising two year groups), while 8% were in classes made up of three or more grades. However, little research exists on the implications for teaching and learning, with existing research focusing on teachers.\(^{49}\)

Research in 2005 with teachers of four-grade classes found that they used a wide range of grouping approaches across and within subject areas, including whole-class teaching, two-grade teaching, single-grade teaching, peer tutoring and across-grade grouping.\(^{50}\)


Switzerland: combination of approaches

In Switzerland multi-grade primary classes often consist of three grades, while very small one teacher schools have one class with six grades (the school starting age is six).\textsuperscript{51}

In line with other jurisdictions, a study of schools in alpine regions found that teachers employ a range of strategies including parallel teaching: planning lessons according to year group, for particular subjects. For some subjects, particularly maths and native language, schools often use extra resources for a second teacher to allow teaching according to age group.\textsuperscript{52}

Teachers often combine these approaches with more pupil-centred approaches, including using daily or weekly plans for pupils to work on while the teacher is engaged in other tasks.\textsuperscript{53}

Very small, one-teacher schools can face challenges in terms of teacher isolation, although in some areas staff of small schools meet regularly as part of a network for professional development and mutual support.\textsuperscript{54}

9 Conclusion

Composite classes have a long history in schools and are prevalent both in Northern Ireland and around the world. While the evidence is not strongly conclusive, research does not tend to find significant differences in outcomes for students in single-year or multi-year groupings. Areas for further consideration could include:

- The evidence base for the objective of taking actions to address composite classes of more than two year groupings;
- The implications of any actions to reduce composite classes with more than two year groupings from a rural proofing perspective, and taking into account the higher proportion of Catholic maintained schools within this cohort;
- The lack of specific training opportunities for teachers of composite classes in Northern Ireland; and
- Practice in other jurisdictions, for example, teacher training on composite class management.