**Gypsy Days Data: Roll Growth and Decline before and after 1 June**

At the 2012 meeting of the School Statistics Monitoring Committee (SSMC), sector representatives requested information about:

a) How the Ministry chose the roll count dates for quarterly roll counts and why these cannot be moved.

b) How many schools are impacted by Gypsy Day – for these schools is the 1 June roll count a fair reflection of their roll for Quarter 3?

**Decision to select 1 June**

In setting the roll return dates for quarterly roll counts, consideration was given to:

a) **Proximity to the period being funded**

Selecting a roll count date close to the period being funded results in a meaningful level of resource for most schools.

Both the 1 June and 1 September roll count dates proceed the quarter being funded by one month. This is the minimum amount of time required to process the roll and calculate payments. Moving the dates any earlier than this would result in the roll not reflecting the period being funded.

b) **Transparency**

Calculating payments in advance reduces complexity as there is no requirement for backdated adjustments. Payments made in advance are simpler to reflect in funding notices, making the payment calculations more transparent.

c) **Compliance**

To ensure a minimal level of compliance, school management systems have been adapted to include a one-page report that provides information specific to funding only. In addition, schools are no longer required to keep sets of audit class lists for Year 9-13 students for the July roll return.

Considerable consideration was given to choosing meaningful roll count dates. While other dates would have their advantages and disadvantages, we are convinced that, for the above reasons, the 1 June and 1 September roll count dates were the best suited.

**Impact of Gypsy Days on 1 June roll count data**

Below is an explanation of the data we used, our findings and conclusions about the impact of Gypsy Day.

**Data – our approach**

1. We found ENROL data was unreliable because schools do not always keep ENROL records up-to-date; therefore we decided to do a comparison between 1 June and 1 July roll returns.
2. However, the 1 June and 1 July roll counts cannot be directly compared. For 1 June, students are counted as Full Time Equivalents (FTE)\(^1\); for July, students are counted by the number of individuals enrolled (headcount).\(^2\)

3. We did modelling to convert the 1 July roll information to a FTE so that we could compare 1 June and 1 July roll data meaningfully.

4. For the analysis below, we have assumed that all part time students in the 1 July data were enrolled at 0.5 FTTE.

5. For a fuller explanation of how we approached the data, please see appendix 1.

Our findings

6. Between 1 June and 1 July 2012, 85% of schools had a static or declining roll.

7. In every location category (main urban, secondary urban, etc), the majority of schools experienced roll decline or a stable roll. Please see the table below, showing roll Growth/Decline between 1 June and 1 July 2012.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Schools with Declining/Static Roll</th>
<th>Number of Schools with Growing Roll</th>
<th>Percentage of Schools with Declining/Static Roll</th>
<th>Percentage of Schools with Growing Roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main urban</td>
<td>218</td>
<td>30</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Secondary urban</td>
<td>32</td>
<td>3</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>Minor urban</td>
<td>71</td>
<td>19</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>Rural area</td>
<td>50</td>
<td>15</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Total</td>
<td>371</td>
<td>67</td>
<td>85%</td>
<td>15%</td>
</tr>
</tbody>
</table>

8. Of the 67 (i.e. 15% of schools) that experienced roll growth, 44 reported an increase of less than 2%.

9. Of the 67 schools that experienced roll growth:

- 45% were situated in main urban areas
- 28% were situated in minor urban areas
- 22% were situated in rural areas.
- 4% were situated in secondary urban areas

10. Only 9 schools had an increase of 5% or more of their Year 9-15 roll. These 9 schools had a total increase of 223 students. Please note: 2 of these 9 schools are School A and School B.\(^3\) The remaining 7 schools account for the additional 57 students.

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\(^1\) This means part time students are aggregated. For example, 2 students enrolled at 0.5 are counted as 1 student on the 1 June roll return.

\(^2\) On the 1 July roll return, two students enrolled at 0.5 are counted as 2 students.

\(^3\) Please see appendix 1, footnote 8.
11. Of these 9 schools, 2 were rural schools. These 2 schools had a total increase of 2 students.

Conclusions

12. Based on the data above, 1 June roll count will not be altered. This is because:

   a) The majority of schools experienced a stable roll or roll decline. We see this even among rural schools: 50 experienced a static or declining roll while 15 had roll growth. Where there was roll growth, the number of schools involved was small, as was the number of students.

   b) Schools in urban areas had roll growth also. It seems unlikely that this roll growth is because of Gypsy Day. This shows, then, that in any quarter, factors other than Gypsy Day can cause a school’s roll to grow after the roll count date. Changing the roll count date would not address this issue.

13. However, we acknowledge that schools subject to quarterly roll counts should be compensated in some way for roll growth. This is because:

   a) Quarterly roll count policy was introduced to encourage schools to retain students. We therefore should be recognising schools that have had roll growth.

   b) Quarterly roll count policy was also introduced on the basis that schools should only be funded for students for the time that they are enrolled at the school. For this reason also, we should be recognising schools that have experienced roll growth.

14. We believe that a modified extraordinary roll growth process is the way to achieve this. It is an existing process that enables us to address roll growth after the roll count date.
Appendix 1: Data – Our approach

1. We measured the impact of Gypsy Day using two different sets of data:
   a) ENROL data 2011
   b) Funding roll data from 1 June and 1 July 2012

2. The ENROL data shows constant decline in all schools from 15 May to 1 July. No schools reported an increase after 1 June.

3. We recognise that it is unlikely that this data is accurate. We know schools do not always keep ENROL records up-to-date.4

4. The roll count data is more accurate.5 However, the 1 June and 1 July roll counts cannot be directly compared. For 1 June, students are counted as Full Time Equivalents (FTE)6; for July, students are counted by the number of individuals enrolled (headcount).7

5. Of the 438 schools subject to quarterly roll counts, 303 (69%) have no part-time students on their 1 July 2012 roll. For these schools, the 1 June and 1 July roll data can be directly compared on a FTE basis.

6. To assess the impact of part time students, we have modelled different scenarios for the 135 schools with part time students. For each scenario, we have converted the part time students from a head count basis to an estimated FTE basis, assuming different levels of part time attendance (0.75, 0.5, 0.25 FTE).8 Please see below:

<table>
<thead>
<tr>
<th>Modelling PT students at 0.25 FTE</th>
<th>Number of students (FTE) gained/lost between 1 June and 1 July at School A</th>
<th>Number of students (FTE) gained/lost between 1 June and 1 July at School B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-95</td>
<td>-3</td>
</tr>
<tr>
<td>Modelling PT students at 0.5 FTE</td>
<td>+159</td>
<td>+7</td>
</tr>
<tr>
<td>Modelling Students 0.75 FTE</td>
<td>+413</td>
<td>+18</td>
</tr>
</tbody>
</table>

4 Please note that ENROL provides information on the number of students on a headcount basis – for more information please see paragraph 10, as well as footnotes 3 and 4.

5 School roll returns are auditable – therefore, there is a strong incentive for schools to ensure roll return data is accurate.

6 This means part time students are aggregated. For example, 2 students enrolled at 0.5 are counted as 1 student on the 1 June roll return.

7 On the 1 July roll return, two students enrolled at 0.5 are counted as 2 students.

8 Overall, the scenarios are not significantly different. However, the results for individual schools can be significant. For example, School A and School B have more part time students than full time students. The results vary significantly between the three scenarios. As another point of comparison, both School A and School B lost students (93 and 8 respectively) between 1 June and 1 September 2012 roll counts; again, both roll counts are on a FTE basis and are therefore directly comparable.
7. We have chosen to analyse the data from the scenario for: 438 schools – with all part-time students modelled at 0.5 FTE. Our analysis has allowed us to draw conclusions about:

   a) the impact of Gypsy Day and

   b) what we can do to address this impact.

8. We have chosen this scenario because:

   a) It takes account of the 135 schools with part time students.

   b) Of the three scenarios modelled, it offers neither the highest or lowest percentages of roll decline/growth. It seems fairest to pick the ‘middle scenario’ when trying to gauge the true impact of Gypsy Day on schools.

<table>
<thead>
<tr>
<th></th>
<th>number of schools with a declining roll</th>
<th>number of schools with a static roll</th>
<th>number of schools with a growing roll</th>
<th>percentage of schools with a declining roll</th>
<th>percentage of schools with a static roll</th>
<th>percentage of schools with a growing roll</th>
</tr>
</thead>
<tbody>
<tr>
<td>303 schools with no PT students</td>
<td>192</td>
<td>69</td>
<td>42</td>
<td>63%</td>
<td>23%</td>
<td>14%</td>
</tr>
<tr>
<td>438 schools - all PT students modelled at 0.25 FTE</td>
<td>305</td>
<td>75</td>
<td>58</td>
<td>70%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>438 schools - all PT students modelled at 0.5 FTE</td>
<td>289</td>
<td>82</td>
<td>67</td>
<td>66%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>438 schools - all PT students modelled at 0.75</td>
<td>275</td>
<td>85</td>
<td>78</td>
<td>63%</td>
<td>19%</td>
<td>18%</td>
</tr>
</tbody>
</table>
Appendix 2 - Extraordinary Roll Growth Process for Quarterly Roll Count Schools

In 2012, we created a new extraordinary roll growth process. This compares the funding roll for a quarter with the average roll for the quarter.

The average roll is calculated by averaging three mid-month roll counts. Extraordinary roll growth funding is only generated when the average roll is 5% higher than the funding roll.

e.g. 1 June 2012 funding roll of 42 Year 9-10 students

The school might provide the following mid month data:

15 June 2012: 45
15 July 2012: 45
15 August 2012: 47

Average roll = 46

Average roll: is 9.5% higher than the funding roll

Extraordinary roll growth funding is generated for 4 students (Average roll – funding roll = number of students that generate extraordinary roll growth funding).