How to Read Implementation Status and Progress Reports for Maths

Of the many reports available to you in Renaissance Place, perhaps the two that you will use most often are the Accelerated Maths Implementation Progress Report and the Accelerated Maths Implementation Status Report. You can generate these reports to compare performance among schools, to compare classes in the same year or to compare classes in the same school.

There is a lot of data in these reports. In this document, we will help you focus on a few key indicators to determine the success with which schools in your school network are implementing Renaissance recommended practices.

Key Indicators

Among the data in these reports, there are four key indicators. As you begin to implement Accelerated Maths recommended practices, you will want to work toward the targets listed below for each of these indicators. Do not expect to see these results in the first year of implementation, but use them to gauge when you have reached full implementation.

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>Target at Full Implementation</th>
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</thead>
<tbody>
<tr>
<td>Objectives mastered per week</td>
<td>4 objectives</td>
</tr>
<tr>
<td></td>
<td>2 objectives (years 2 and 3)</td>
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<tr>
<td>Average percentage correct on practice assignments</td>
<td>75%</td>
</tr>
<tr>
<td>Percentage of students scoring above 85% correct on tests</td>
<td>90%</td>
</tr>
<tr>
<td>Engaged maths time</td>
<td>40 minutes</td>
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<tr>
<td></td>
<td>20 minutes (years 2 and 3)</td>
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Let us take a look at each of these indicators in more detail.

Keep in mind that if you are using Accelerated Maths for a part-time program such as summer school, after school or intervention, your targets should be adjusted accordingly.
Objectives Mastered per Week: The Most Important Indicator

Objectives mastered per week are a measure of the quantity of student maths work. They indicate whether students are mastering the recommended number of objectives.

What to look for
We recommend that students master 4 objectives per week (or 2 objectives per week for students in years 2 and 3).

What to do when objectives mastered per week are low
While we hope that students will complete the recommended number of objectives per week, it is important to encourage students to work at their own pace. Naturally, some students will work more quickly than others.

The pace at which students master objectives fluctuates during the year as the level of challenge changes. Some objectives are easier to master than others. Personal circumstances, such as illness, can also affect student work pace.

If a particular class is working at a slow pace, it may be that students are practising without adequate instruction beforehand or are working with objectives that are too difficult. Encourage teachers to assign objectives from lower and higher libraries as needed, provide both whole-group and small-group teaching, and use the Status of the Class Report to determine when students are ready for more work.
Percentage Correct
Percentage correct indicates the quality of student maths practice by showing how well students are scoring on Accelerated Maths assignments.

What to look for
We look at percentage correct in two ways:

1. The average percentage correct on practice assignments. You will find this data on the Maths Implementation Status Report, but not the Maths Implementation Progress Report. The Average % Correct scores should be viewed in conjunction with the % Students At/Above 75% scores. Aim for at least 75 percentage in the Average % Correct column and 90 percentage in the Students At/Above 75% column.

   Remember, if the Average % Correct for a group of students is 75 percentage, many students may be scoring below 75 percentage. Set a target for a school average that is higher than 75 percentage. Students who maintain a higher average, such as 90 percentage, show greater growth in maths skills.

2. The percentage of students scoring above 85 percentage correct on tests. When recommended practices are fully implemented, at least 90 percentage of students should score above 85 percentage correct on tests.

What to do when practice average percentage correct is low
Students who score low on practice assignments may not be receiving enough instruction before practising. Are teachers providing group teaching on key concepts before assigning practice?

What are some other possible reasons for low percentage correct on practice assignments? Some students may be:

- Struggling with basic maths facts
- Rushing to complete assignments
- Having difficulty with a particular content area, such as fractions
- Working in the wrong library (e.g., lacking prerequisite skills for the objectives in the library)

Encourage teachers to work closely with struggling students to determine the cause for low practice scores.
What to do when a low percentage of students scores above 85 percentage on tests

If the percentage of students who scores above 85 percentage on tests is low, students may be struggling with some of the same difficulties outlined for low practice scores. In addition, some students might be getting too much help on practice assignments, so they score poorly on tests. Others might suffer from test anxiety.

Talk with teachers. Are they providing regular instruction on key concepts? Do they need to provide small-group instruction for students who struggle with a particular content area?

Engaged Maths Time

Engaged maths time is a measure that combines the quality and quantity of student maths practice. This measurement provides teachers with information regarding how actively engaged students are during maths practice time. For each student, engaged maths time is calculated by multiplying the number of objectives mastered during the reporting period by 50 minutes, and then dividing by the number of teaching days in the reporting period. The allotted average time to master an objective is 50 minutes.

What to look for

The ideal engaged maths time is 40 minutes. This is based on the recommendation of mastering 4 objectives per week, at 50 minutes per objective. A student will need 200 minutes per week to master four objectives, or 40 minutes per day in a five-day school week. If students have an engaged time higher than 40 minutes, they are mastering more objectives than expected during the reporting period. If students have a lower engaged time, they are mastering fewer objectives than expected during the reporting period.

What to look for (years 2 and 3)

The ideal engaged maths time is 20 minutes. This is based on the recommendation of mastering 2 objectives per week, at 50 minutes per objective. A student will need 100 minutes per week to master two objectives, or 20 minutes per day in a five-day school week. If students have an engaged time higher than 20 minutes, they are mastering more objectives than expected during the reporting period. If students have a lower engaged time, they are mastering fewer objectives than expected during the reporting period.
Tips for Reviewing Reports

- **At first, focus on the percentage of students above 85 percentage correct on tests.** Once you see good progress on this indicator, you can begin to pay attention to objectives mastered per week and engaged maths time.

- **Look for consistency in the information.** For example, you may notice that a class with a low average percentage correct has a high number of objectives mastered per week. Are students rushing to complete objectives before receiving adequate instruction?

- **Seek additional information to understand low scores.** Observe classes with low scores. Gather the Diagnostic and Status of the Class Reports for these classes to get more information about individual student performance.

What to Do With the Data

Data alone will not improve student performance. Data combined with action improves results! Here are tips for converting information into interventions:

- **Note strengths.** Which teachers or years are doing especially well? What are these teachers doing?

- **Celebrate progress.** Reports reflect student and class progress. Monitor reports regularly to view improvements as students gain experience with the program. Success for both teachers and students is the most important motivator as well as the most important target. Draw attention to progress to create a culture that inspires more success.

- **Build sustainability.** Provide opportunities for teachers to collaborate. Identify teachers who can act as mentors for teachers who are struggling. Be specific about strategies that foster success. For example, teachers who use the Status of the Class Report every day typically have better results than teachers who do not use it daily. Determine which types of additional training will address any concerns you have.

Glossary

**Average percentage correct** reflects students’ scores on Accelerated Maths assignments.

**Engaged maths time** is an estimate based on the number of objectives mastered and an anticipated 40 minutes per day of maths practice (or 20 minutes per day of maths practice for years 2 and 3). It is displayed in minutes per day.

**Objectives mastered per week** indicate if students are meeting the recommendation of mastering 4 objectives per week (or 2 objectives per week for years 2 and 3).