

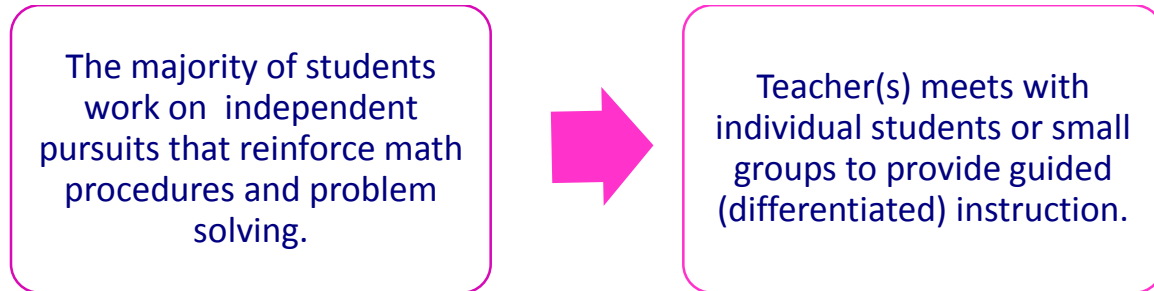
Daily/Advanced 5 Math: A Homeroom/Resource Co-Teaching Model

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What is Daily/Advanced 5 Math?

An organizational model that helps teachers deliver the program outlined in the QEP.



What are the five pursuits in Daily 5 Math?

- Work with numbers
- Explore geometry and measurement
- Work with data
- Solve problems
- Work with math language *integrated

Co-teaching: Using your resource teacher as a team-teaching partner

- Use resource time for team teaching instead of a pull-out resource model
- Resource teacher comes in and you each take small group of 4-6 students for a guided math lesson while the other students work independently
- Allows you to have some math resource time
- Targets needs of all students in your classroom: students who are struggling, students who are working at level, and those that are ready for enrichment
- Well thought out organization and planning tools make the co-teaching model efficient and easy to use

Keys to Successful Implementation of Daily 5 Math

It is important to *teach* students to work independently so you that you can be available to work with students in small groups. The elements listed below are essential in establishing independent work habits in all your students.

1. Training Period (building independence)

- 1-2 months
- Build time gradually as you see they are ready
- Make expectations explicit and review them regularly
- Avoid helping/answering questions, instead teach strategies to use if they are having trouble

2. Establishing routines

- For transitions
- For when are problems encountered
- Acceptable voice level for partner/group work
- Distribution of activities
- Seating

3. Reflective selection of activities in independent pursuits

- Select activities that students can work on independently
- Leveled/open-ended activities that can suit a variety of ability levels
- Rotate activities every few weeks in independent pursuits to maintain interest
- Introduce activities in large/small group lessons first to build familiarity

4. Flexible groupings

- Group students by ability level based on a concept
- Short pre-assessment will help you determine groupings
- Maximum of 6 students per group

5. Implementing strategies that support 'outlier' students

- Set check-ins
- Light System
- Open/Closed Sign
- Sand Timers

Classroom Set- Up

- Think about movement patterns through the room: how students will access materials, how they will get to independent work areas, and conference areas.
- Set-up area for independent materials that is easily accessible
- Small bulletin board space that indicates schedule of the day
- Small group work area(s) equipped with all materials needed

Independent Pursuit Activities

The activities you use for a pursuit should be ones that:

- You introduce to students in large or small group lessons to develop familiarity first
- Open-ended or leveled in such a manner that students of all ability levels can work on them and are challenged
- Ones students can work on ***independently*** without teacher support
- Do not have to be changed weekly, but occasionally to maintain interest

The activities listed below are **sample activities only**, they should **not be treated as a recommended list**. Activities you will choose to include in your classroom may vary based on the grade level you teach, ability range of students you have, concepts previously covered, and materials available in your school or classroom.

Work with numbers

- Basic fact games
- Sudokos
- Games that involve operations
- Zupelz (variety of levels)
- Other games/activities involving arithmetic concepts

Explore geometry and measurement

- Tangram puzzles
- Activities with pattern blocks
- Reflections
- 3D shapes
- Open-ended area and perimeter questions using tiles, grid paper, dice etc.
- Volume activities with blocks o centicubes

Solve Problems

- Think tank problems (variety of levels)
- Logic grids
- Towers of Hanoi
- Analysis of word problems

Work with math language *integrated into lessons

One goal of your focus and small group lessons should be on building an understanding of math language related to the concept being taught. This can be done through discussion, development of definitions together, and looking at various examples and non-examples.

Planning Small Group Lessons

- Quick “pre-assessment” of knowledge helps form well balanced groups
- Groups may change by term, unit, concept etc.
- Not 4-5 different lessons
- Open ended questions or tasks that can be easily adapted
- Take the same problem and change complexity

Using small group lessons for assessment

Small group lessons are an excellent place to assess whether students have a good understanding of concepts or not. Quick observational assessment tools such as a simple rubric, notes, or a colour coding system on a class list will help you keep track of student progress throughout a unit or term.