

# Take Flight with Understanding Numeration Plus<sup>®</sup> and Understanding Math Plus<sup>®</sup>

The goal of Fraser Gordon's Flight Plan (Toronto District School Board, Ontario, Canada) involves the students in discussion around the concepts delineated in the Understanding Math software. In the Flight Plan model each group of three students (may vary according to the needs and size of students in a group but three is an ideal group size) is assigned a role in their Flight Crew.

## Flight Crew

The Flight Plan method of lesson study uses the Navigator's report sheet. Each time that the group goes to the Understanding Math Plus program they are expected to complete the following roles. To cover the concept a number of flights (lessons within the Understanding Math Plus programs) might be needed. With each flight, the crew will rotate through the roles.

- a. **Pilot** – responsible for flying the plane. Note that the pilot can only input instructions based on a group consensus.
- b. **Navigator** – responsible for recording their flight plan. The navigator will record all the ideas and diagrams that her/his flight crew feels are essential to understanding a concept (*see Navigator's report sheet*).
- c. **Co-pilot** – responsible for ensuring that all work is covered and crew stays on task.

Once each flight is over, the Navigator sheet is photocopied for each member of the crew for use by each member to complete their Math Journal entry of the flight. This is repeated for every flight until the concept is covered.

## Math Journal entries based on Navigator's report sheet:

Each member of the crew is responsible for completing a Math Journal entry based on their Navigator's report. In their own words, each member of the crew will explain their understanding of the concept including any illustrations that are important to the ideas they are outlining. Not all illustrations from the flight will always be needed. Crew members need to decide on the clearest and most direct way to explain the math concept using the flight plan that they took (*see Navigator's report sheet*).

