

Figure 4. Diagnostic score report 3 with graphical representation of skill mastery with interpretive material, alternate reporting template.

#### **Category Description**

Develop Number Sense - Estimating quantities less than 1000 using referents

#### Skill Descriptions

There were five skills assessed in this specific outcome, where attribute 1 is the least complex and attribute 5 is the most complex skill.

- Attribute 1 skill in applying estimation using 100 as a referent to a quantity of 100 to 1000.
- Attribute 2 skill in applying estimation using 10 as a referent to a quantity of 100 to 1000.
- Attribute 3 skill in applying estimation using 25 as a referent to a quantity of 100 to 1000.
- Attribute 4 skill in identifying an estimation strategy to solve a problem using a quantity of 100 to 1000.
- Attribute 5 skill in solving estimation problems using a quantity of 100 to 1000.

## FREQUENTLY ASKED QUESTIONS

## How Do I Interpret My Student's Scores?

Each score is based on a scale of 1 to 15.

The score ranges show how much the scores might vary if your student were to take the tests repeatedly without learning additional skills. In other words, the scores within this range are considered "equal" statistically.

Percentiles compare your student's performance with those of other students.

The number of questions that were included in the category is listed. More detailed item response information including a breakdown of your student's correct, incorrect and omitted responses is provided.

# How Do I Interpret My Student's Skill Mastery?

When your student has consistently mastered a skill it means that based on his or her test performance, it is very likely that your student possesses the specific set of knowledge & skills as measured by the items on the test.

There may be some measurement error when determining the probability of your student's skill mastery. Why? This is because if your student took the test repeatedly without learning new skills after each test administration, he or she may obtain a probability that is higher or lower than what he or she obtained now. That means that there is a small range of probability levels that likely capture the true probability

of skill mastery. This range of possibilities is represented by the differing bar lengths. The shorter the bar, the less error is associated with calculating probability of skill mastery. Conversely, the longer the bar, the more error.

Depending on the probability of skill mastery, your student is classifed as having consistent, moderate, or limited mastery of the skill. These classif cation categories are aligned with achievement standards set by a group of experts in the area of student mathematics performance. Your student's skill mastery profle is one piece of information that can be used in combination with your own evaluation of his or her math skills. If your student has consistently mastered a skill, this should be consistent with his or her performance solving similar problems within your math class.

## How Can I Use These Results to Improve my Student's Performance?

Make note of the skills that were classifed as "Moderate Mastery" and "Limited Mastery". This information can be shared with the student and his or her parents so you can work together to implement strategies to learn and improve. Go to our accompanying web site to access skills tutorial and links to other learning resources.

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Figure 5. Interpretive material for score report 3.

# Score reporting templates for evaluation with teachers.

The three score reporting templates were evaluated with Grade Three teachers participating in the diagnostic mathematics field test. Score reports 1 and