

The ITA Model for Integrating Academic Language into Mathematics Classes

Guidelines

(examples in italics are taken from the H-M “Represent Fractions” lesson)

IDENTIFY the academic language

Decide on the main idea and objective

Main idea: Write the main idea of the lesson.

A fraction names part of a whole or part of a group.

Math objective: Write the content objective for the lesson.

Read, write, and identify fractions.

Find the “content-obligatory” language in the lesson

General vocabulary: List the academic vocabulary that is not subject-specific, or any essential non-academic words that ELLs might not know.

whole, group, equal part

Content-specific vocabulary: List the academic vocabulary that is specific to the particular subject.

fraction, numerator, denominator, fraction names

Specialized grammatical structures: List grammatical structures that are specific to the particular subject.

is/are (they are not used in the same way that grammar rules specify)

Complex grammatical structures: List grammatical structures that are particularly complex and thus difficult for ELLs.

Would ___ be larger/smaller than when ___?

Language functions: List things that students will have to do with language during the lesson.

suppose, (explain, describe, represent)

Discourse structure: List text structures that are typical of the particular subject.

“Ask Yourself” Test Tip bubble

TEACH the academic language

Front-load the main idea and essential vocabulary

Main idea and vocabulary: Write the main idea in comprehensible language; select the language that is *essential* for understanding the main idea.

Guidelines (contd.)

*A fraction names part of a whole or part of a group.
fraction, equal parts, whole group*

Activity: Design a hands-on activity, relevant to students' backgrounds, to introduce the main idea

Use graham crackers/small crackers to show equal parts of a whole/group

Integrate the rest of the language into the lesson

Concepts and vocabulary: Describe how other concepts and vocabulary will be integrated into instruction throughout the lesson.

Vocabulary used throughout the lesson

Reinforce numerator and denominator with manipulatives

Have students identify whole and group

Functions: List the function that will be emphasized, and how it will be integrated into instruction.

Suppose; hands-on activity, folding/refolding paper to show different sizes.

Mini-lessons: List language items that will be taught using mini-lessons.

Mini-lesson on how to form fractions, with emphasis on pronunciation.

Individual mini-lessons on is/are as needed during Practice.

Hands-on experiences: Describe hands-on activities that will be used, and how academic language will be used to support them.

See activity for functions

Teacher models suppose language; students use in activity.

ASSESS the academic language and content

Link task to instruction, objectives, standards

Create assessment task: Describe an activity that incorporates all or most of the academic language of the lesson.

Students create suppose problem, describe fractions, and solve problem.

Link to instruction, objectives, standards: Show how the task is linked to instruction, the lesson objectives, and the national ESL standards.

See supplementary lesson plan.

Evaluate language and content performance

Rubric: Use the lesson objective(s) and TESOL sample performance indicators to create a rubric for assessing student performance.

See supplementary lesson plan.