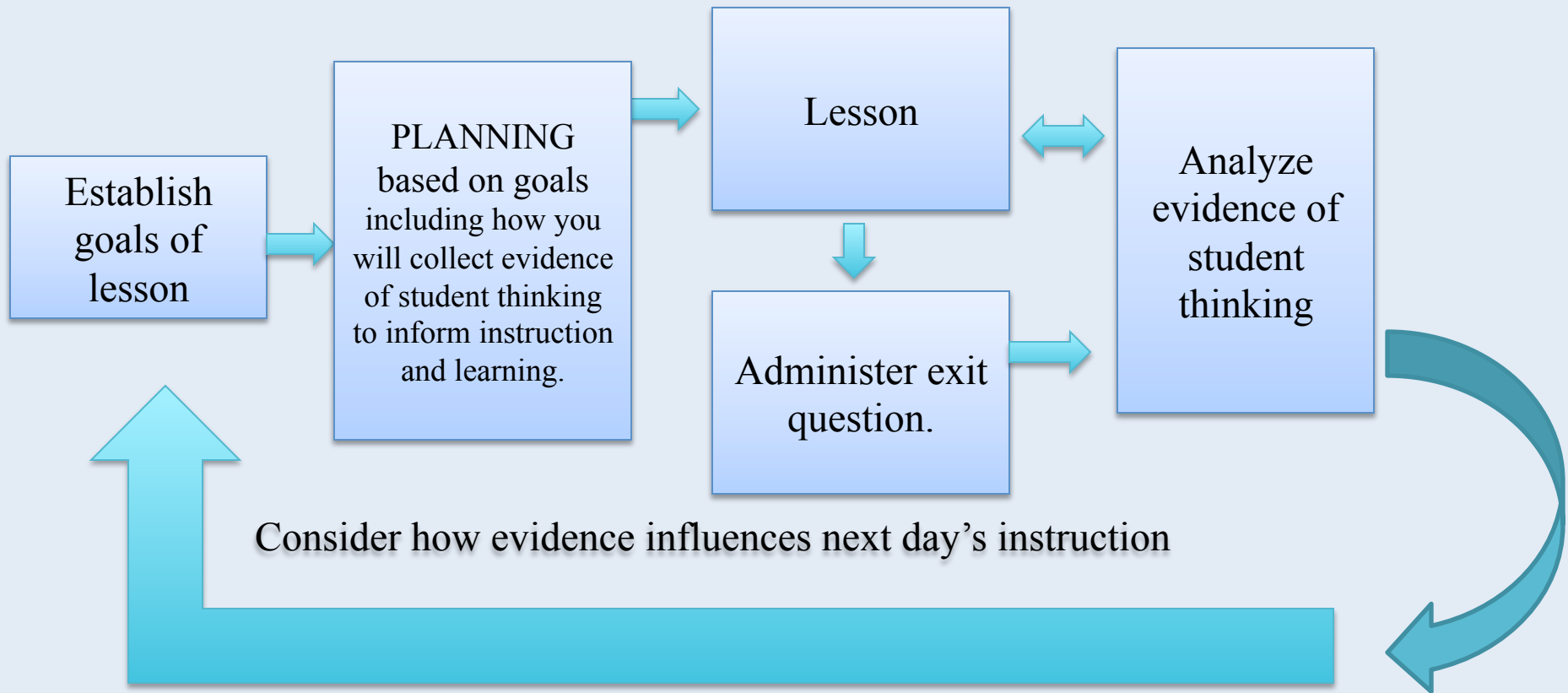


The
**Ongoing
Assessment**
Project



Number Line Case Study

Ongoing



Lesson Goals

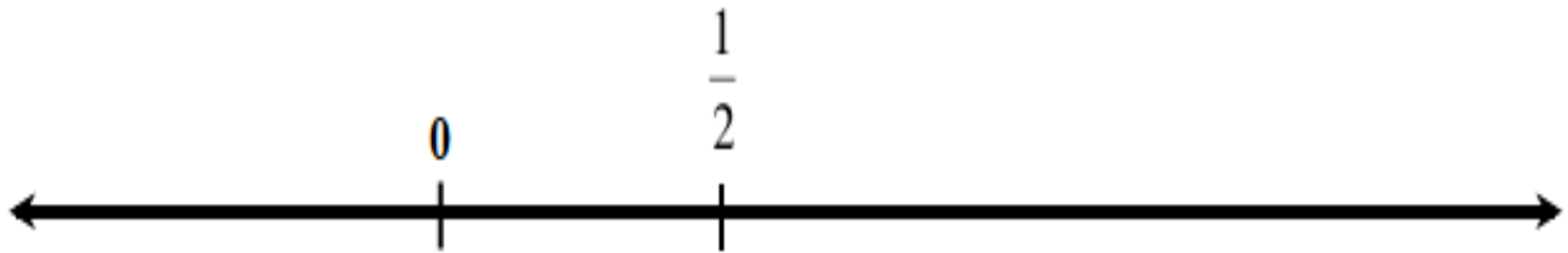
To strengthen understanding of fractions as quantities, students will locate fractions on number lines in which the size and number of units on the number lines vary.

Lesson Overview

Working in pairs students placed proper, improper, and mixed numbers on number lines in which the number and size of the units in the number line varied.

Mrs. Smith's Exit Question

Draw and label a point on the number line below to show where $\frac{7}{4}$ is located.



Planning Questions

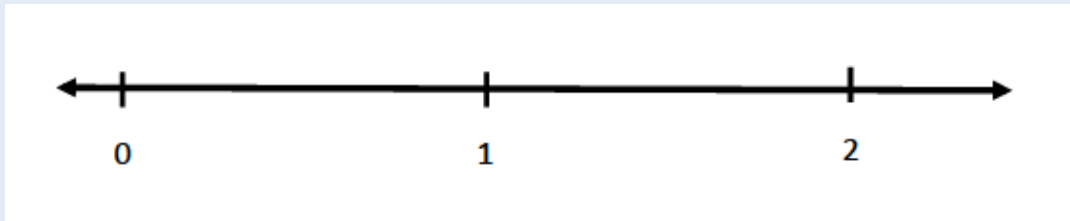
- What is evidence of developing understandings that can be built upon?
- What are some errors or issues that need to be addressed?
- What are potential next instructional steps?

Ms. Smith's plan

- Engage students in some addition and subtraction problems using number lines as warm-up problems.
- Use the evidence from the warm-ups to guide her lesson.

Addition and Subtraction Warm-ups

Question A: Tom walked $\frac{3}{4}$ of a mile in the morning and $\frac{1}{2}$ a mile in the afternoon. Use the number line below to show how far Tom walked altogether.



Question B: Susie is walking $2 \frac{7}{8}$ miles from her home to school. At $1 \frac{3}{8}$ miles from her home she stops for a drink of water. How much further does she need to walk to school? Use a number line to solve the problem.

Questions

1) Solve QA and B

2) Based on the evidence in the student work from the number line exit question, what strategies do you anticipate students will use to solve these problems?

3) Why are these good questions to extend the number line work and start to develop fraction addition and subtraction concepts?

Take aways

- What are 3 take-aways from the case study?