

Developing a Deeper Understanding of Fractions by Charuta Joshi, Math enrichment specialist.

From the beginning, Charuta Joshi insisted on learning math through understanding and not process, through estimation and not rote learned steps. In this session, she focused on comparing a pair of fractions. By the end of her session, they felt almost magical.

Her 'Do now' was a worksheet with 25 pairs of fractions. She asked us to circle the larger of the fractions. This was to be done without following any procedure. Tough call!

She then asked every participant to turn and talk to the person next to us and discuss 3 strategies that we used to compare fractions. And then 3 things we found tough to do.

Almost everyone had followed a procedure different from what Ms. Joshi had expected.

She then went on to explain to us strategies to compare fractions.

- a) More of the same size parts – $\frac{3}{8}$ v/s $\frac{5}{8}$
- b) Same number of parts of different sizes – $\frac{3}{5}$ v/s $\frac{3}{7}$
- c) More or less than landmark fractions – $\frac{5}{7}$ v/s $\frac{9}{8}$
- d) Distance from a landmark fraction – $\frac{3}{4}$ v/s $\frac{4}{5}$

After this, the participants were divided into various groups and were given 18 square shaped paper each. Which they then prepared into various fraction flash cards. In all, most of us did leave with a better understanding of fractions and how we can get our children to understand the concept in a new fresh way.