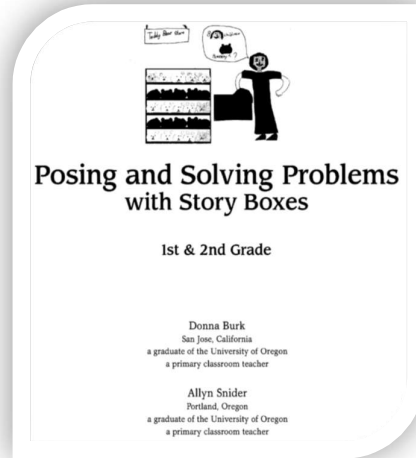


An appetizer for the mini-workshop on 28/4/2020.

Explore x Engage x Chat — Autonomous Learning with Word Problems

From pages 1 – 2
of this book.



"Problem solving is not a distinct topic, but a process which should permeate the entire program and provide the context in which concepts and skills can be learned."

National Council of Teachers of Mathematics

Deep understandings about number and operation develop as students work to make sense of challenging story problems, just as understandings about language grow as children read and write. The key to students' interest and engagement, however, appears to lie in the quality of the problems themselves. Problems that stretch children a bit beyond what they already know how to do or are open-ended enough to be solved in a variety of ways—*real* problems, in other words—invariably create more interest, involvement, and learning than drill and practice exercises masquerading as problems.

Although the paragraphs above are quoted from a book for grades 1 and 2, the same principle certainly applied to higher grades as well.

Let's look at a problem usually thought of as more suitable for higher grades in HK.

Dear teachers,

How do you think about this problem?

Explore x Engage x Chat --- **Autonomous Learning with Word Problems**
探索·參與·對話 -- 應用題之自主學習

Exercise Counts
練習不簡單 200428

A woman is on diet and goes into a shop to buy some turkey slices. She is given 3 slices that together weigh $\frac{1}{3}$ of a pound, but her diet says that she is allowed to eat only $\frac{1}{4}$ of a pound.

How much of the 3 slices she bought can she eat while staying true to her diet?

--- From Boaler, J (2015). What's Math Got To Do With It? How Parents and Teachers Can Help Children Learn to Love Their Least Favorite Subject. (2nd ed.) Penguin: New York.

1. Would you like to solve it?
2. How would you solve it?
3. Do you find it challenging?
4. Do you enjoy solving it?

5. Would you pose it to your students?
6. How could it be posed to your students?
7. When?