#### Collaborative learning

In the context of problem solving as a development of knowledge and acquisition of skills.

- Collaborative learning is a situation in which two or more people learn or attempt to learn something together.
- collaborative learning is based on the model that knowledge can be created within a population where members actively interact by sharing experiences and take on complimentary roles.

## Lev Vygotsky

- The concept of learning as a social process. In recent years, his ideas have been reflected in a number of learning and teaching approaches.
- Although these approaches vary to some extent, essentially they all promote the idea that young people's learning is best served when they have opportunities to learn with and from each other, and are shown how to do so effectively.

#### In my experience

• Collaborative learning lends itself to:

LiteracyNumeracyScienceGeographyICTTechnologyHistoryMusicP.E.

But especially in Problem Solving

## Problem Solving

- 'To help children become good at solving logic problems and puzzles it is important that they are taught and acquire essential skills and strategies and understand how and when to use them.' – The National Strategies: Problem Solving with EYFS, KS1 and KS2 Children
- Therefore Collaborative learning can facilitate more learning once key skills are achieved.

### These skills include

- Identifying carefully what is known and what needs to be found out;
- Looking through the information that is given for any relationships or patterns;
- Developing a line of thinking that involves making inferences and deductions and testing these out;
- Taking one piece of the information and changing it, while keeping everything else fixed, to see what effect it has on the problem;
- Choosing a way of recording and organising the given information that helps to see how the problem is structured;
- Checking answers along the way to see if they satisfy the conditions or rules.

#### The roles of the learners

- Promoting the acquisition of skills for learning collaboratively, to learn more effectively
- Illustrations of roles.
- Wearing a different 'hat' than normal.

#### Our task

• There is a given problem to be solved in the context of a collaborative lesson.

 Let's presume you have acquired the knowledge necessary to work as a team member, though in an unfamiliar group! CECEK!

# •The clock is ticking!

## Recap!

- Did you learn effectively?
- Were you able to draw on previous learning?
- Were you listened to?
- Did everyone stick to role?
- Was there time to complete the task and present?

#### Resources and sites

<u>http://www.collaborativelearning.org/</u>

- <u>http://nrich.maths.org/7231</u>
- <u>http://www.educationscotland.gov.uk/lear</u> <u>ningteachingandassessment/approaches/</u> <u>collaboration/supportmaterials/resources</u> <u>/index.asp</u>