Mathematical problem-solving is the number one curricular goal in both National Council of Teachers of Mathematics (NCTM) in the United States and Ministry of Education (MOE) of China. In fact, problem-solving is one of the five fundamental mathematical processes identified by NCTM (2000). However, MOE not only regards fostering problem-solving ability as a main goal of mathematics education, MOE also stresses that developing students’ thinking ability is the core of mathematical ability. As MOE defines problem-solving and reasoning:

Problem-solving: being able to solve mathematical problems occurring in daily life, workplace and in other subject-matters; being able to use mathematical language to express, communicate and form mathematical thinking. (MOE 2000)

It is clear that mathematical language plays an important role in developing student problem-solving and mathematical thinking ability. This talk shares some insights from a qualitative study conducted in a few elementary schools in China on how teacher’s classroom discourse promotes students use of appropriate mathematics language to communicate their thinking, and hence facilitates developing student problem-solving skill and mathematical thinking ability. (Received September 16, 2014)