TEACHING AND LEARNING PRINCIPLES

Curriculum

A high quality mathematics curriculum for adult learners should:

- include the concepts of number, data, geometry, and algebra at all levels of learning so that students can develop and connect mathematical ideas.

- weave together all the elements of mathematical proficiency – not only procedural fluency, but also conceptual understanding, ongoing sense-making, problem solving, and a positive attitude about learning mathematics.

- feature worthwhile tasks, such as activities that are drawn from the context of real life experience.

Learning Environment

In an adult education learning environment, mathematics instruction should:

- build on what students already know, valuing the various informal and alternative strategies students use to solve problems.

- include opportunities for students to question, reason, solve problems, define goals and monitor their own progress by using estimation, mental math, computation, and technology when appropriate.