1. SOCIAL CONTEXT

The first impression of a visiting mathematics educator from countries with a stronger mathematics education tradition in discussions with counterparts from the Philippines might be that of similarities in situations. As solutions begin to be discussed, however, he might begin to realize that beneath these similarities are greater differences. The dominant reality in a country like the Philippines is the scarcity of resources, both human and material. Five or six students have to share a textbook. Many schools lack classrooms, so classrooms meant for 40 students are crammed with 80 students. Or schools have double sessions, in some cases triple sessions a day. Teachers are poorly trained and have to teach in a very difficult environment.¹

2. DEPENDENCE ON WESTERN COUNTRIES

The paradoxical aspect of these differences, in particular the scarcity of human and material resources, is that instead of isolating us from developments in advanced countries, they make us more vulnerable to them. This is because we have to depend on Western mathematics educators and Western textbooks. We do not have the necessary number of experts nor the funds to develop our own textbooks. In the 1960s, for example, our Department of
Education invited Peace Corps Volunteers from the U.S. to bring in the ‘New Mathematics’ into Philippine schools. In the late 1980s and early 1990s, the Secondary Education Development Project, which developed new mathematics textbooks and teacher training, was funded by the World Bank with foreign consultants and advisers.

3. **NO SIGNIFICANT IMPROVEMENT**

   However, after several decades of curricular reform in mathematics education, we have not seen significant improvement in the achievement of our students. The challenge then is to reflect on our methods of mathematics education reform and ask if we can find better ways.

4. **DOMINANT APPROACH**

   The dominant approach has been to:

   1. Bring in a new approach, usually theory-derived and usually from the U.S. This was the method in bringing in the New Mathematics in the 1960s and in subsequent reforms – newer trends such as back-to-basics, problem-solving, constructivism.
   2. Develop materials based on these approaches.
   3. Do pilot studies on small, selected scales, which usually say that the new approach is better.
   4. Then, given that necessary funding is available, implement on a national scale. In this implementation, teacher training is done following what is called the cascade model:

      - National level training for regional trainers
      - Regional level training for division trainers
      - Division level training for district trainers
      - District level training for school trainers
      - School level training for teachers in the schools