Outline of RCML Proceeding

* Introduction (Tugba& Enrico) – 0.5
* Theoritical Framework – max. 3 pages
  + Preservice and Inservice Teachers’ Misconceptions
  + Middle school students’ algebraic misconceptions (total 1.5)
  + Relation of preservice teachers misconception and their math. (problem solving ) knowledge? (If there are studies about that specifically) (0.5)
  + Self-efficacy of preservice teachers about teaching a content – MTEBI (1 page)
* Methods (Enrico& Tugba) (1 or 1.5 page)
  + Sample (one semester Fall 2013 ?)
  + Instrument
    - Students’ misconceptions – rubric
    - MTEBI
    - KATE test (needs proper grading)
* Result (2 pages)
* Conclusion (1 page)
* Reference (1page)

In this study, middle school mathematics preservice teachers were given assignments where they were asked to deal with possible algebraic misconceptions about ratio, proportion, decimals, percents, surface area and volume.  In these assignments, we asked preservice teachers to explain how they would assist middle school students about these specific misconceptions.  Using these data, we were able to obtain answers to our research questions,

(1) which algebraic misconceptions are most difficult for preservice teachers to address? (2) How is the performance of preservice teachers in addressing misconceptions related to their algebra knowledge, specifically problem solving knowledge; and

(3) How is this performance related to their teaching self-efficacy?