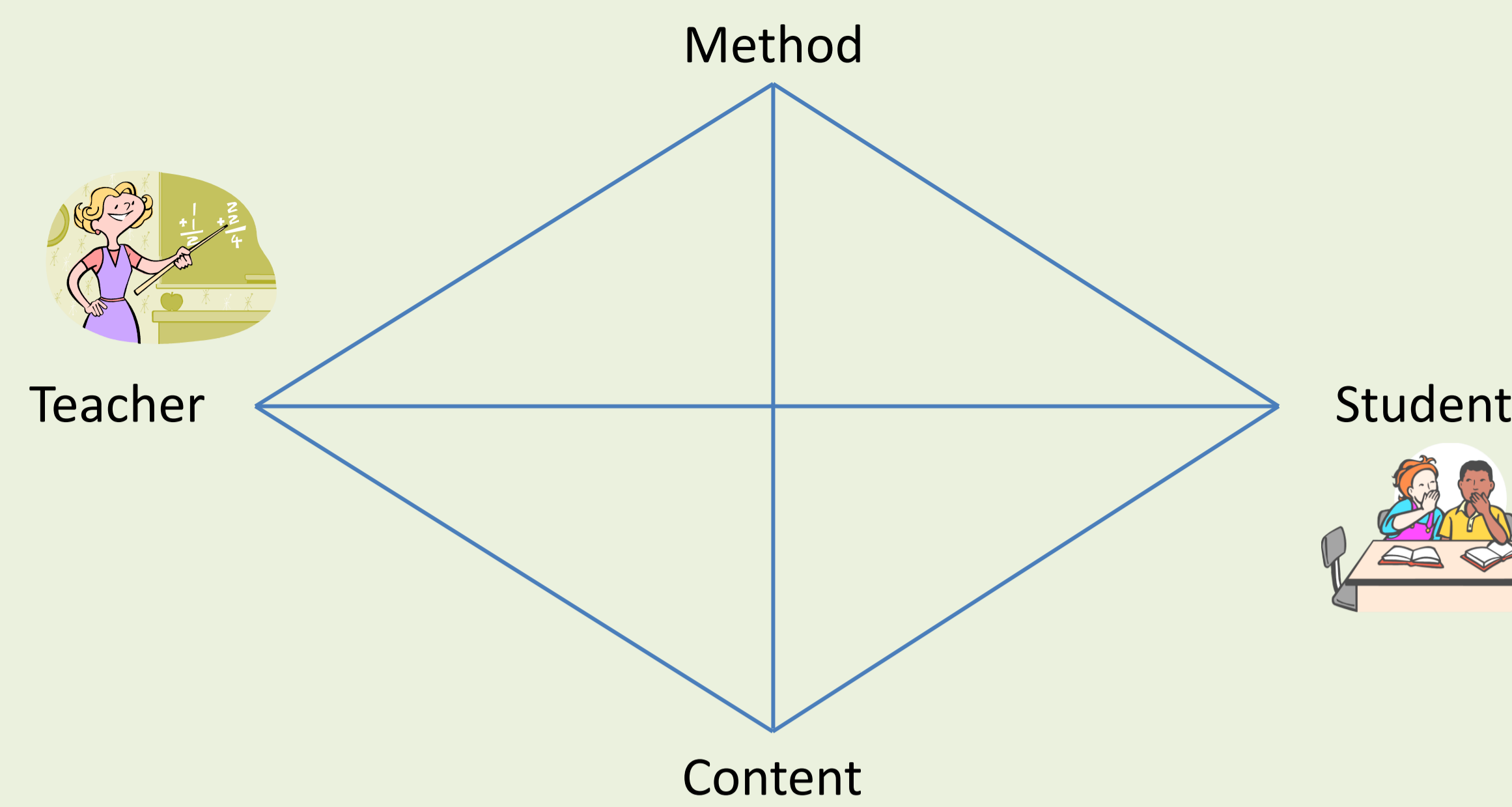


STUDENTS RESISTING STUDENT-FOCUSED TEACHING PRACTICES

This is about a Swedish teacher, who has made big efforts to change her teaching to include what Kilpatrick et al. (2001) called efficient practices, such as students discussing with each other, justifying their strategies, doing hands on activities with manipulatives.



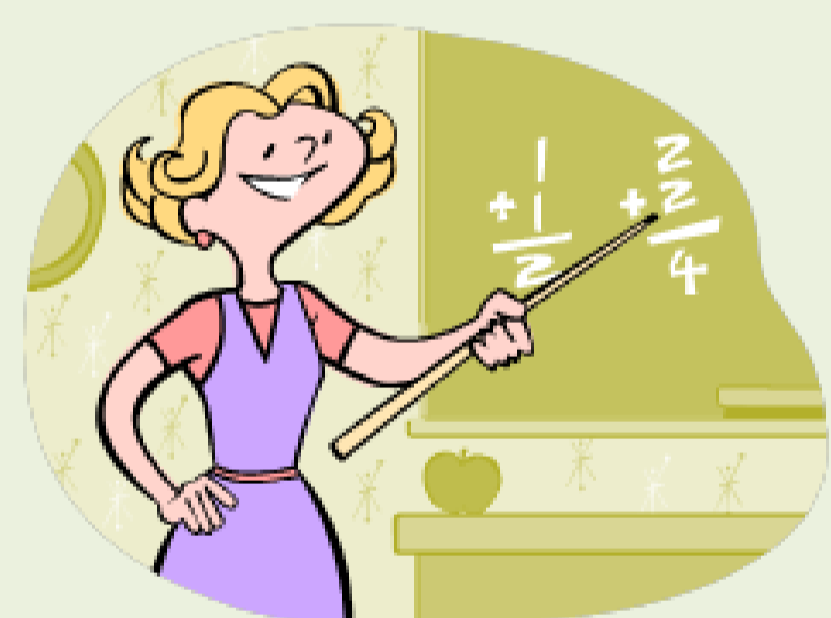
Simplifying model of key interactions in a complex teaching episode (Alexandersson, 1994).

Eleven of her students in grade 8 were interviewed about their perception of mathematics teaching and how they learn mathematics.

Social Perspective	Psychological perspective
Classroom social norms.	Beliefs about own role, others' role, and general nature of mathematical activity in school.
Socio-mathematical norms.	Mathematical beliefs and values.
Classroom mathematical practices.	Mathematical conceptions and activity.

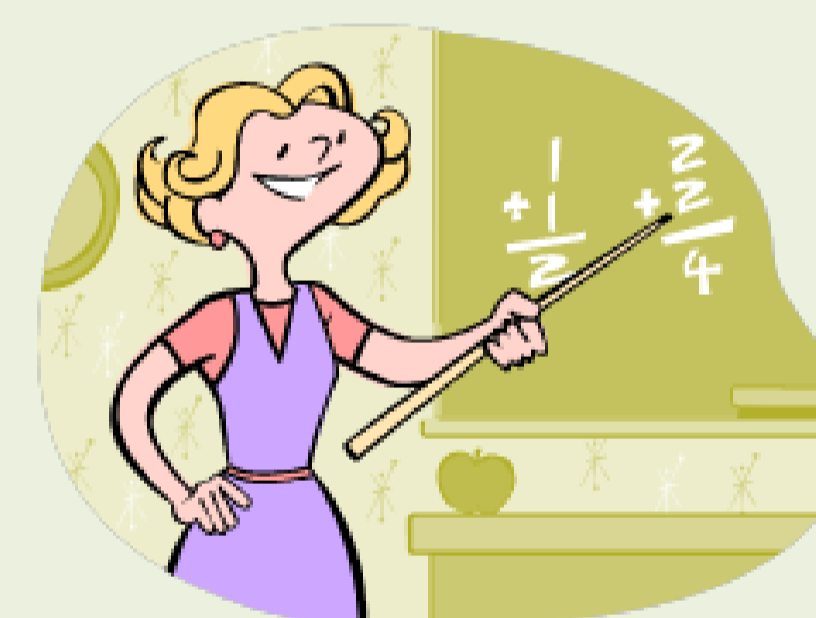
Data Analysis will use Cobb and Yackel's framework (1996).

As a result of the interviews, clear differences in beliefs and perceptions between the teacher and students have emerged. The following themes arose from the analysis using the above framework.



Social norms – Belief about roles.

Teacher: I try to avoid direct answers to the students questions. Instead I return another question which will encourage them to think by them selves.



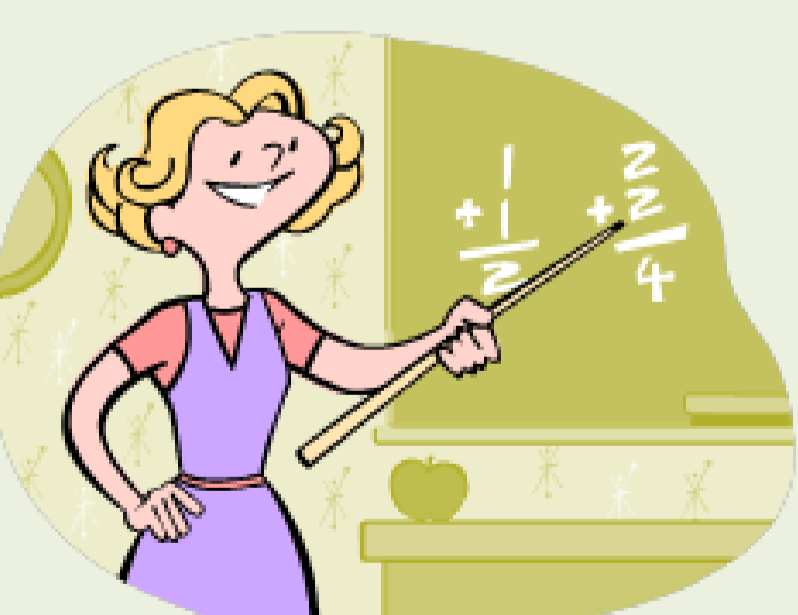
Socio-mathematics norms - School mathematical beliefs and values

Teacher: I want them to be able to see mathematics in different ways. As a teacher, my role is to expose them to new experiences.

Students: Why can't she just tell us how to do it?

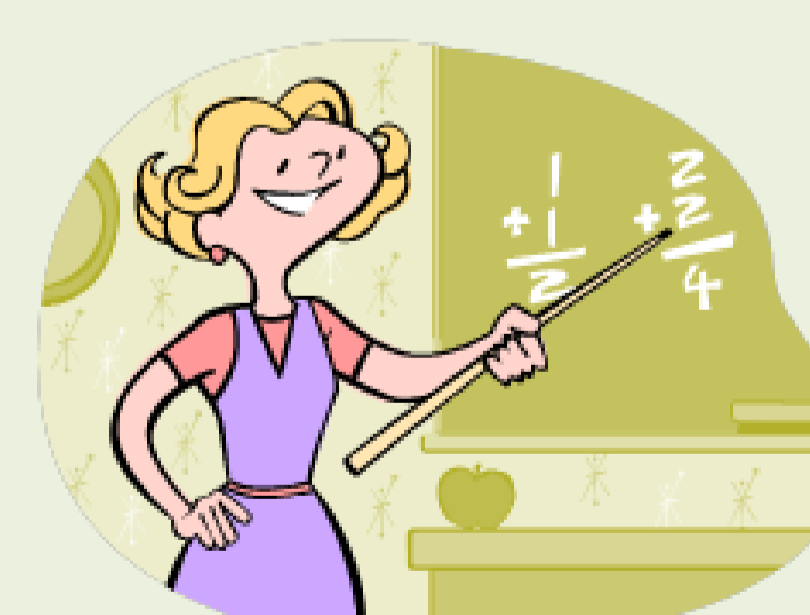


Students: Why do we have to use manipulatives if we already know how to calculate.



Socio-mathematics norms - School mathematical beliefs and values

Teacher: I want them to discuss mathematics with each other. And I want them to be able of value different methods.



Socio-mathematics norms – School mathematical beliefs and values.

Teacher: I aiming for developing all five mathematic abilities, which are spoken in the national syllabus (Lgr 11), not just the traditional one about methods.

Students: Why can't we just get to know one method, the best one. And then we practice to use it in our textbooks.



Students: Mathematics is calculating.

