In this poster we reflect upon our practices as teacher educators revisiting a study we developed with forty future teachers aiming to analyse their statistical knowledge at the beginning of their training.

The study with the students (Barros, Martins & Pires, 2009)

A qualitative and interpretative approach 2,3, aiming (i) to identify which statistical knowledge 40 future educators and teachers (1st year of the License Degree in Basic Education) possessed when starting their training, and (ii) to assess the influence of the work undertaken in the curricular unit Numbers and Statistics in the progression of this knowledge.

Data collected by an initial questionnaire, participant observation and a final questionnaire, and data analysed by interpreting the students' answers 2,3.

The development of the curricular unit has allowed students to deepen, change or consolidate their statistical knowledge, mainly regarding what concerns understanding concepts.

The class context main options in the classroom

Topics: data and variables, organizing data in tables and graphs, location and dispersion measures, and probabilities.

Take into account students' prior knowledge and their difficulties.

Concern in clarifying and systematizing the different concepts and procedures.

Problem solving.

Project/Group work (Let’s get to know our group).

What are the reasons for this “success”? Which aspects of our practices have contributed to a real improvement of students’ learning?

Some reflections

Consideration of students’ needs and difficulties.

Identification of students’ needs and difficulties in the initial questionnaire (the starting point of the study).

Determination of our teaching practices.

Integration of evaluation within the learning process.

The use of the different meanings of evaluation (diagnostic, formative, summative).

Reformulation of teaching strategies and practices.

Discussion about understanding of concepts.

Importance of the questioning of the meaning of results.

Valuing the nature of tasks and their diversification.

Tasks of a more closed nature as well as more open ones.

Tasks involving the clarification and application of concepts.

Completing a project (Let’s get to know our group).

Empowerment of participants.

The student as the builder of his knowledge, bestowing shape and meaning on his learning, within a context of active participation in the negotiation of the different meanings.

Reflection as:

- an activity which is liable to contribute to the professional development of teachers (not future teachers), and to the improvement of practice;
- a rigorous and disciplined process, different from streams of consciousness, invention and belief.

Reference