# Reflective future teacher and some challenges and needs in chemistry lesson preparation

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#### Abstract

In modern societies, there are clearly high expectations towards the teacher. Self-reflection and the ability to accept feedback determine the ideological axis of his activity. When designing educational activities, every teacher should have the ability to see the world "through the eyes of a student" to design lessons that are attractive from the point of view of teaching methods, topics and problems addressed, and young people's expectations. When and why future teacher can develop these skills? Such a picture of expectations towards the teacher makes the semester and inter-semester teaching practice particularly important in the process of teacher education (e.g., Farnicka and Koch, 2020).

Future teachers participate in school practise and conduct chemistry lessons. At the beginning, they run one lesson at primary school level and next two lessons at secondary school level (with basic and extended chemistry program). Reflections after each lesson is very valuable.

The study aims to collect future chemistry teachers' opinions about preparing and conducting chemistry lessons during school practise to encourage their self-reflection.

The method used in the study was a diagnostic survey using a questionnaire developed by the authors in which the following areas were addressed: didactic and substantive preparation for lessons. The survey was carried out in the form of an online version in three steps: a) on the primary school level, b) on the secondary school level, c) after a 4-week internship.

The tool used in this study is a questionnaire using a Likert scale of five levels (1= absolutely not; 5 – absolutely yes). The questionnaire consists of 7 closed questions.

The study sample consisted of 87 answers. The questionnaire revealed the difficulties future chemistry teachers face when conducting lessons. The main challenges stem from the diversity of students in the class and the lack of ability in time management. Other difficulties include a lack of student activity, the insufficient ability of students to apply knowledge from different subjects (mathematics) during chemistry learning, and the need for general support in organizational matters.

## References

Farnicka, M., Koch, A. (2020). Praktyki studenckie jako pierwszy krok rozwoju zawodowego

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### Kevwords

future teachers, chemistry lesson, pre-service teachers training, internship at school