Impact of reducing the number of pupils in French first-grade and second-grade classes in reinforced educational priority networks (REP+): evaluation of the effect on pupils' performance and teaching practices

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↘ Summary

This study published by the Directorate for Evaluation, Forecasting and Performance monitoring (DEPP) in collaboration with a team of researchers from LaRAC (*Laboratoire de Recherche sur les Apprentissages en Contexte, Université Grenoble Alpes*), Pascal Bressoux and Laurent Lima, focuses on the impact assessment of the measure to reduce the size of *CP* (first grade) and *CE1* (second grade) classes in reinforced priority education networks (*REP+*), implemented from the start of the 2017 school year. It offers several contributions to the scientific literature on class size reduction: on the one hand, it provides **a measure of the effects on school performance in the context of a public policy implemented on a very large scale; on the other hand, the study explores the processes at work on the basis of survey and observation data** on both teaching practices and the behaviour of pupils in class.

The observation and statistical evaluation protocol was designed, upstream of the policy being evaluated, by the DEPP with the support of researchers specialising in the evaluation of public policies and education sciences. **Data collection from pupils, school headmasters and teachers from the start of the 2017 school year** made it possible to measure the impact of the reduction in class size in the short and medium term on the progress of pupils in *REP+* (enrolled in *CP* in 2017-2018, then in *CE1* in 2018-2019), to describe the methods of deployment of the measure, to collect information on teaching practices in first grade and then in second grade, and to observe *in situ* the commitment of pupils, teacher-pupil interactions as well as teaching practices in first grade.

In line with the gradual introduction of the policy, the deployment of the measure has resulted in a significant reduction in class size: in *REP+*, the average size of first grade classes fell from 21.6 pupils at the start of the 2016 school year to 13.1 in 2017, while the average size of second grade classes fell from 21.4 pupils at the start of the 2017 school year to 14.2 in 2018. Pupils in the study sample who were enrolled in *REP+* schools and benefited from the measure in first grade and then in second grade benefited each school year from **a class size that was approximately 7 pupils smaller than that of pupils in the comparison group**, enrolled in priority education networks (*REP*) schools with similar characteristics to the *REP+* schools in the sample.

The survey data collected by the DEPP revealed **local steering of the reform**, marked by **sustained support from the school district inspector** (in the selection of teachers assigned to the smaller classes and in the monitoring of these teachers) and **additional training** provided to first grade and second grade teachers working in the smaller classes in REP+.

The impact measured on pupils' skills in French and mathematics confirms the trend observed in the international scientific literature, i.e. positive effects: **at the end of second grade, i.e. after two years of schooling in a reduced class, pupils in REP+ schools have higher results** than pupils in *REP* schools with similar characteristics, but who have not benefited from the reform. These effects are statistically significant. They are equivalent to 16% of the gap observed at the beginning of first grade between the *REP+* group and the group outside Priority Education in French and 38% in mathematics. This scheme therefore helps to reduce social inequalities at school.

The positive impact of the reduction in class size in *REP+* on pupils' progress is most **visible in first grade and persists in second grade** without any additional effect. It is stronger for the pupils with the greatest difficulties in mathematics, whose proportion drops from 21% at the beginning of first grade to 16% at the end of second grade.

Analysis of the statements of first grade and second grade teachers reveals **positive effects on classroom conduct**. The measure to reduce class size is associated with an improvement in the classroom climate. The latter became more conducive to teaching and learning, both in first grade and second grade. Teachers who benefited from the measure also seemed **more confident about their teaching**. Their level of self-efficacy was higher than that documented for teachers working in *REP*.

In addition, there were some changes in practice. Compared to their peers working in *REP*, in 2017-2018, first grade teachers in *REP+* reported **greater use of differentiation**, active teaching methods, scaffolding and cognitive stimulation; they intervened less in the regulation of pupil activity. In second grade in REP+, the positive effect on differentiation practices in reading and the negative effect on the regulation of pupil activity are even stronger. There was no difference in teaching practices in mathematics according to class size.

Finally, *in situ* observations of student activity and teaching practices in first grade classes in 2017-2018 and 2018-2019 revealed **significant changes in terms of student activity**. In the smaller classes in REP+, pupils benefit from more individual interaction with the teacher, have more appropriate behaviour with regard to school work and are more involved in school activities. The observation tools do not reveal any major changes in teaching practices.

<u>Read the full document (in French)</u>