EXECUTIVE SUMMARY

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TUTORING FOR EDUCATIONAL EQUITY

A high-impact, on-line tutoring programme for disadvantaged pupils in response to Covid-19

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EsadeEcPol - Center for Economic Policy

The EsadeEcPol Centre of Economic Policy is an independent, multidisciplinary think tank whose mission is reaching consensus to drive evidence-based public policies.

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Empieza Por Educar is an NGO working towards educational equity. Since 2011, this entity has been selecting, training, and education professionals seeking to transform education to ensure equal opportunities for all children.

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Executive Summary

- The pandemic, school closures and the economic crisis have had a tremendously negative impact on the learning and emotional development of pupils around the world according to the first studies using real-time data gathered in Belgium, the Netherlands, Germany, Switzerland, Australia, and the United States. A study carried out in Belgium by Maldonado and De Witte (2020), for example, found that although classrooms were closed for only three months (one third of the school year), the loss of learning in mathematics was equivalent to more than half a school year.

- This learning loss hit pupils from vulnerable backgrounds far harder. Whereas middle- and upper-class families were able to offset school closures by giving their children more resources, support and time, many low-income families were less able to give their children quality time and support. A study of 350,000 pupils in the Netherlands by Burgess and Sievertsen (2020) revealed that pupils from families with a low level of education lost 40% more learning than the average pupil.

- The education crisis caused by Covid-19 is a 'silent' crisis: Its impact is far less visible than that of the health or economic crisis. Nonetheless, its effects on educational development, children's emotional well-being, equality and economic growth are equally serious. Unless effective public policies are implemented to counteract this situation, the pandemic will cause education gaps to widen and very considerable reductions in opportunities, social cohesion, and economic growth in the future.

- The evidence gathered by over 100 experimental studies shows that small group tutoring programmes are, together with education for children aged 0 to 3 years, one of the most effective investments in education. In the spring of 2021, EsadeEcPol and the Fundación Empieza Por Educar (ExE) launched *Menttores*, an innovative programme providing free, on-line, two-to-one afterschool tutoring for deprived pupils hardest hit by Covid-19.

- The programme was evaluated using an experimental method with maximum scientific rigor in the form of a randomized controlled trial (RCT). This methodology is rarely used in Spain to assess public policies, but commonly used in other countries to assess education projects and other types of public policies. This experimental design entails the creation of two statistically equivalent groups selected at random – an intervention group that takes part in the programme and a control group that does not – and enables the estimation of the causal impact of any intervention.

- *Menttores* consisted of an 8-week long, intensive online tutoring program, with three 50-minute sessions a week for pupils aged 12 to 15 (years one and two of compulsory secondary education) in 18 state and grant-assisted schools *(colegios concertados)* in the Region of Madrid and Catalonia (Barcelona and Lleida). Priority was given to schools in low-income districts with a high share of immigrants, such as Usera and Vallecas in Madrid, Cornellà in Barcelona, and the city of Lleida. Taking part in the evaluation were 378 pupils: 206 received tutoring (intervention or treatment group) and 172 did not (control

group). All afterschool tutoring was carried out using digital devices and the Google Workspace platform in groups of two pupils per mentor and focused on maths and social-emotional support (motivation, well-being, work routines).

→ Fifty-two academic mentors took part in the programme. Forty-five of them were paid-for, qualified secondary school teachers. The remainder were volunteers. They underwent a thorough selection process involving more than 500 applicants and received intense training from ExE.

→ To the best of our knowledge, *Menttores* is the world's first tutoring programme provided entirely on-line by qualified teachers and assessed through an experimental methodology. The results of the study have been remarkably positive for pupils in terms of both academic outcomes as well as socio-emotional outcomes. The programme was completed by 96.6% of pupils, attending an average of 17 sessions (70.8% of all sessions) and 920 minutes (76.7% of the target).

In **academic terms,** the results show that pupils taking part in the programme experienced a significant improvement in various dimensions:

— The programme led to a 17% increase in end-of-year maths grades, the equivalent of six months of learning.

— Children who took part in the programme were 30% more likely to pass the subject (maths) than children in the control group.

— The pupils given tutoring also experienced a 17% improvement in the standardized maths test designed by our pedagogical team.

— The *Menttores* programme reduced the share of pupils repeating the academic year by 8.9 percentage points, equivalent to a reduction by 75% compared to the control group.

The programme also had a positive impact on pupils' **socioemotional** wellbeing and **aspirations:**

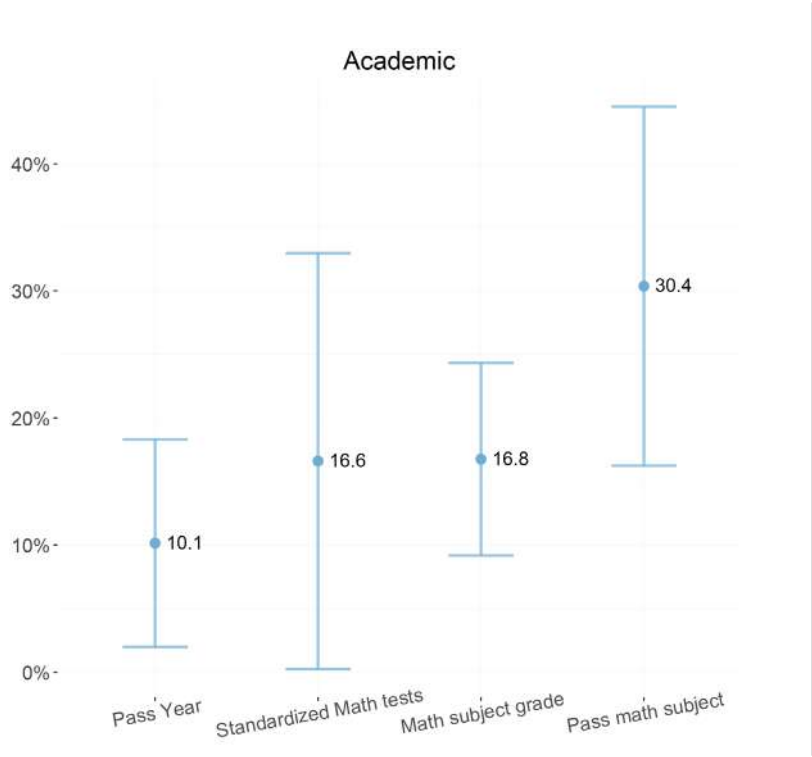
— Pupils participating in *Menttores* were 31% more likely to want to continue studying the academic track in upper secondary school (post-compulsory secondary schooling) than those who did not.

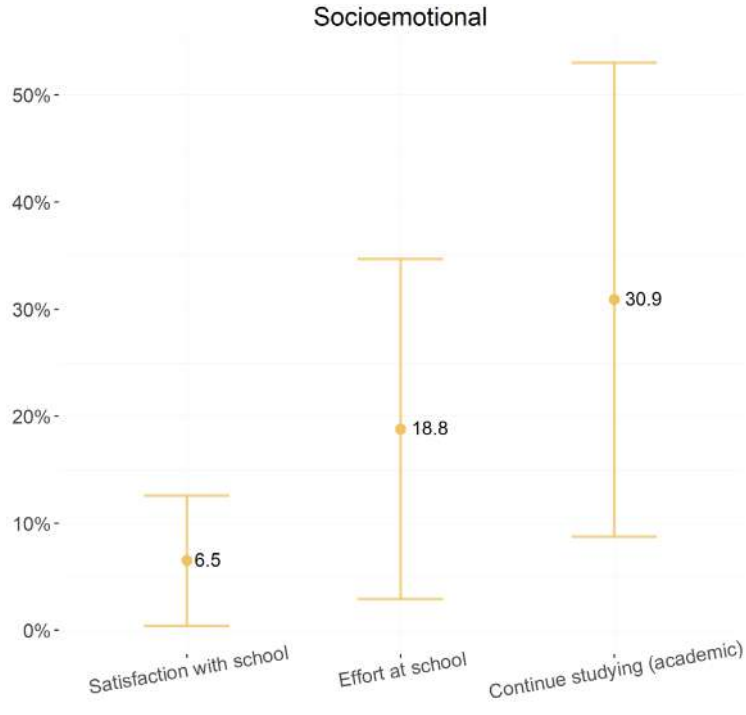
— Satisfaction with school amongst pupils taking part in *Menttores* improved considerably (7% compared to the control group).

— The likelihood of pupils saying they made an effort at school was 19% higher amongst those in the intervention group than those in the control group.

Figure. Programme results

Improvement of intervention group versus control group (in %)





The X axis shows the different outcome variables of interest. Y axis displays the percentage of improvement of the group participating in the program with respect to the control group. The bars represent the limits of the 90% confidence intervals. If the lower bar is above 0, the effect is considered statistically significantly different from zero.

The quality of pupils' **internet connection** also affected the results: the outcome of the programme was more positive amongst pupils who did not experience connection problems. A greater impact was also observed amongst pupils in the second year of secondary school. Finally, a greater impact was observed amongst children with immigrant background and single-parent families (although, due to the size of the sample, these differences were not statistically significant).

Finally, in the **satisfaction surveys** at the end of the programme, the families, maths teachers and school heads said they were very satisfied with the positive impact of the programme on pupils. According to 95% of mentors, a programme like *Menttores* should be available to all the pupils who need it.

'The help and guidance and having small groups of just two classmates were all very positive.'

School headteacher

'Mentors' follow-up of the task was very positive and the regular weekly meetings, the empathy between certain pupils and their mentors, and how they showed pupils that they were able to do it. Congratulations to the mentors and those who designed the programme.'

Maths teacher at a school

'At our school and because of the type of pupils we teach, one key factor is that the programme is free of charge. I'm sure that many families have been able to take part because of this.'

School headteacher

'It was very useful for pupils to get personalised attention and help with their schoolwork. Sometimes pupils couldn´t cope with math by themselves. The help from the mentors made a huge difference.'

Maths teacher at a school

- → The *Menttores* programme shows that online tutoring with small groups achieve good results in Spain that are similar to those of face-to-face tutoring rigorously assessed in other countries. This provides an opportunity to design more accessible and inclusive programmes in different regions for the neediest pupils, including those in rural areas where programmes of this sort are not yet available.

- → Several neighbouring countries have announced unprecedented, multimillion investments in catch-up programmes during and after school. The most ambitious example is possibly the Netherlands, with a three-year budget of €8.5bn (about €1,000 per pupil per annum). The situation in Spain was already giving cause for concern as regards academic results, drop-out rates, and education gaps. So far, unfortunately, the investment earmarked for post-pandemic education catch-up programmes is still comparatively low.

- → The huge amount of finance available in the form of EU funds should enable the implementation of an education catch-up programme far superior to the three-year programme announced by Spain's government and autonomous regions (PROA+) of about €360 million. Our proposal is to increase this figure tenfold, to €3.6 billion in three years (€1.2 billion per annum). Looking ahead, tutoring programmes rigorously evaluated beforehand should become a staple of the education policies of all governments. Few investments have such great returns as scaling up a programme of this type. If the *Menttores* results are extrapolated only as regards the successful reduction of pupils repeating a school year, the government would save some €1.2 billion per annum, i.e., the same as the cost of the scaling up suggested here.

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