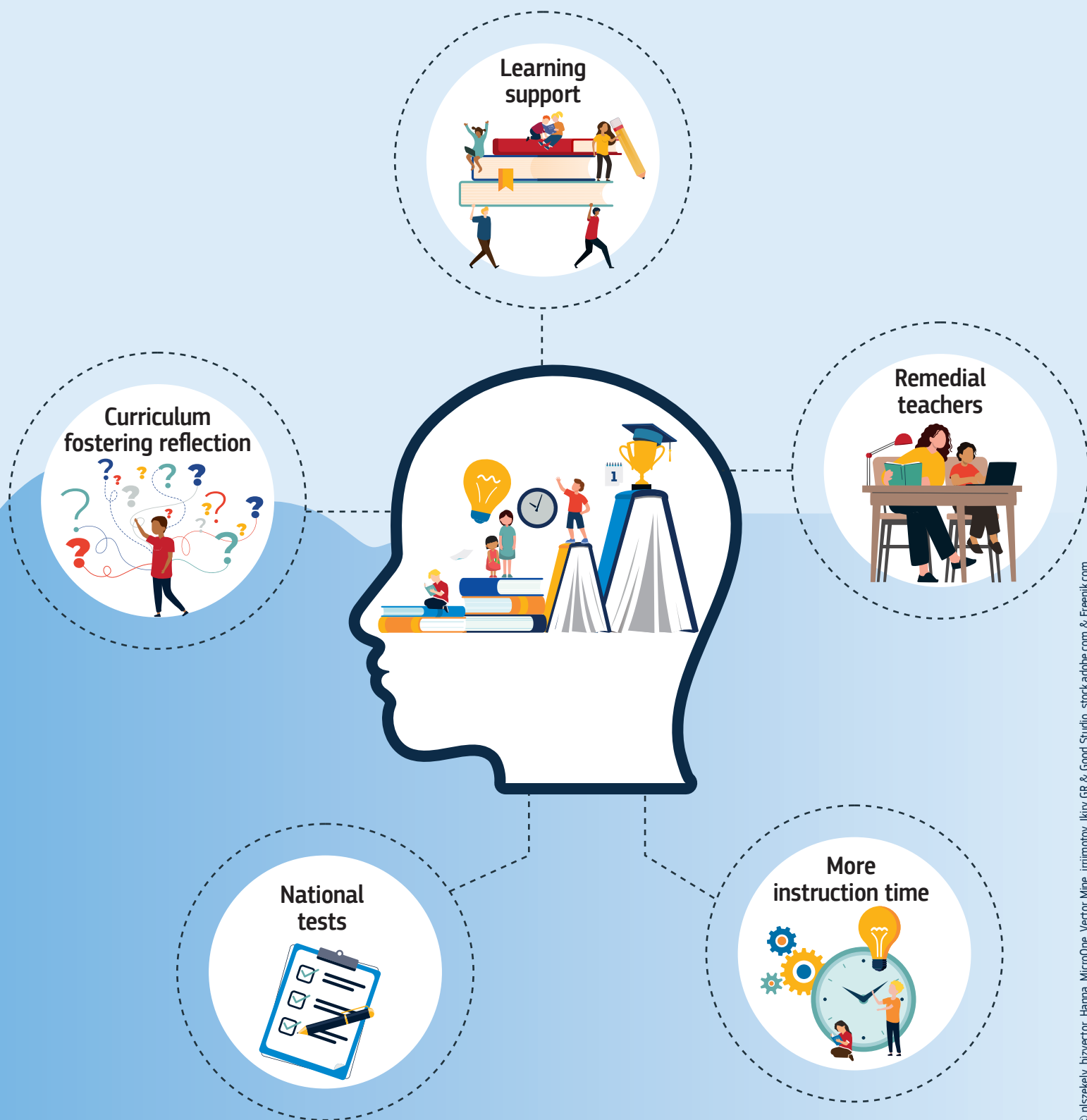


Increasing achievement and motivation in mathematics and science learning in schools

Main factors that contribute to more students achieving basic numeracy and scientific literacy



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Increasing achievement and motivation in mathematics and science learning in schools

Home environment influences achievement in mathematics and science



○ Percentage of students achieving basic numeracy and scientific literacy:

86%

from higher socioeconomic backgrounds

60%

from lower socioeconomic backgrounds

Mathematics takes up more instruction time than science in primary and lower secondary education



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Increasing achievement and motivation in mathematics and science learning in schools

More countries have certified examinations and national tests for assessing students in mathematics than in science

In primary education

28

Education systems

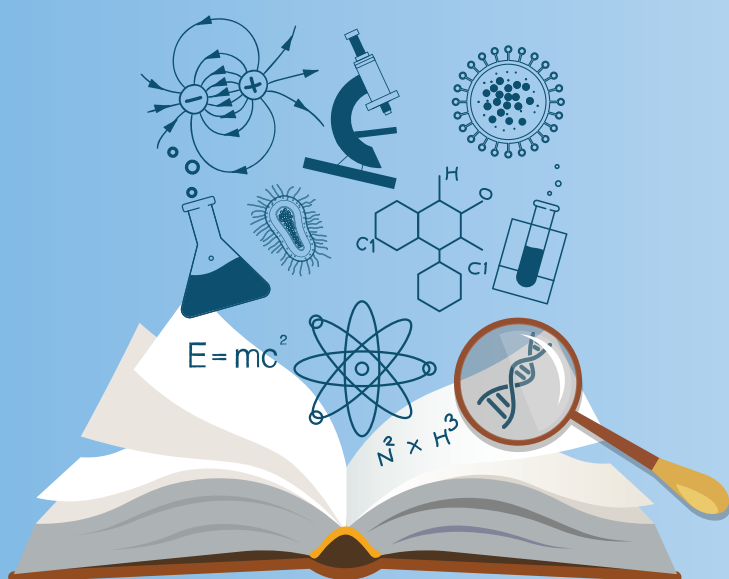


12

Education systems



Ethics and science questions improve scientific literacy



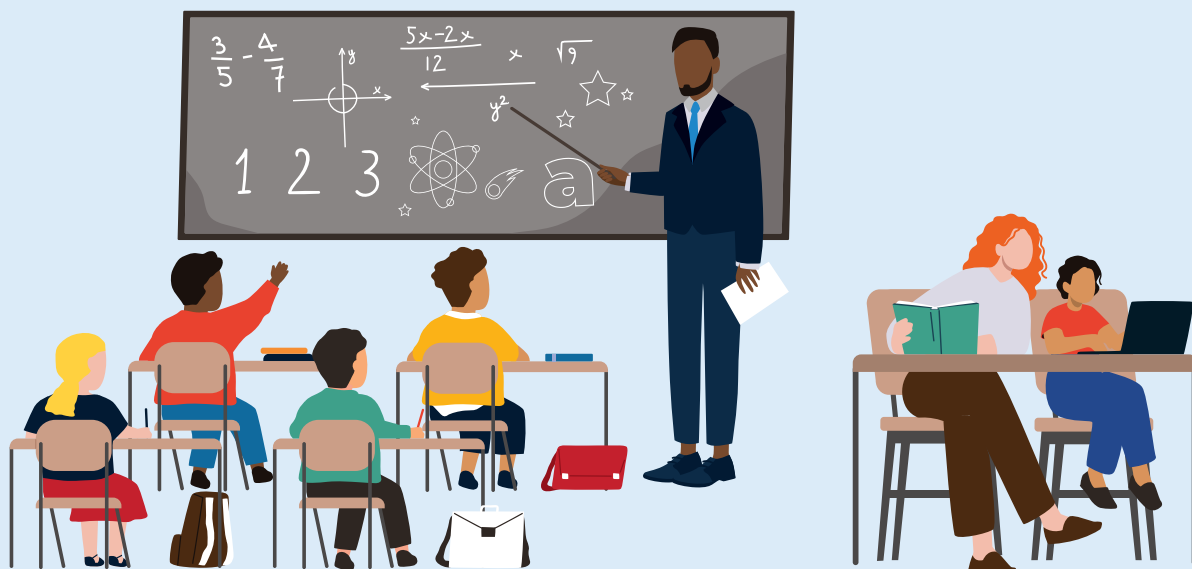
What does it mean to me?
Should people do that?
More benefit ... or more harm?



○ Socioscientific questions in curricula in 24 education systems

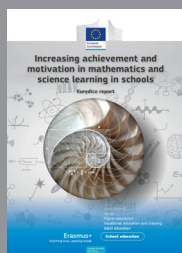
Increasing achievement and motivation in mathematics and science learning in schools

Learning support during the school day helps reducing low achievement



- Mathematics: in 23 education systems - Science: in 20 education systems in lower secondary education

28 (out of 39) education systems in Europe have a shortage of mathematics and science teachers



Increasing achievement and motivation in mathematics and science learning in schools.

Full report is available on our website: <http://ec.europa.eu/eurydice>