

Problems in handwriting development
Extent, causes and possible courses of action

*Analysis of a nationwide survey of primary and secondary school
teachers in cooperation with the German Union of Teachers*

1 April 2015

- A.** **Sample overview/ demographics**
- B.** Problem description
- C.** Effects on general performance at school
- D.** Causes
- E.** Possible courses of action
- F.** Importance of handwriting
- G.** Further comments and wishes from teachers
- H.** Summary

Over 2,000 teachers surveyed

Sample overview

	Primary schools (n=772)	Secondary schools (n=1,230)
Age		
Under 25 years	2%	2%
25 to 34 years	15%	18%
35 to 44 years	26%	26%
45 to 54 years	31%	28%
55 years and older	25%	27%
Sex		
Male	10%	27%
Female	88%	72%
No response	2%	1%
Country		
Germany	95%	96%
Austria	1%	2%
Switzerland	1%	0.4%
Miscellaneous	2%	1%
No response	1%	1%

	Primary schools (n=772)	Secondary schools (n=1,230)
Federal state		
Baden-Württemberg	15%	15%
Bavaria	16%	18%
Berlin	5%	2%
Brandenburg	4%	1%
Bremen	2%	1%
Hamburg	3%	1%
Hesse	7%	7%
Mecklenburg-Vorpommern	1%	1%
Lower Saxony	11%	11%
North Rhine-Westphalia	16%	22%
Rhineland-Palatinate	5%	7%
Saarland	0.3%	1%
Saxony	3%	3%
Saxony-Anhalt	2%	1%
Schleswig-Holstein	4%	3%
Thuringia	2%	3%
No response	4%	3%

Over 2,000 teachers surveyed

Sample overview (multiple responses possible)

	Primary schools (n=772)
Year groups	
Year 1	46%
Year 2	50%
Year 3	56%
Year 4	54%
Year 5 and 6 (Berlin and Brandenburg)	9%
Subjects taught	
German	93%
Mathematics	77%
Foreign languages	37%
Physical and social sciences	82%
Music	46%
Art/ handicrafts	62%
Physical education	41%
Other	32%

	Secondary schools (n=1,230)
Type of school	
Gymnasium (\cong grammar school)	37%
Special-needs school	3%
Other secondary school type	50%
Vocational school	10%
Year groups	
Year 5 and 6	62%
Year 7 and 8	67%
Year 9 and 10	64%
Senior (\cong sixth form)	40%
Subjects taught	
German	51%
Mathematics	27%
Modern foreign languages	36%
Ancient languages	5%
Science subjects	28%
Social sciences	45%
Music	8%
Art/ handicrafts	14%
Physical education	9%
Other subjects	20%

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Teachers see clear problems related to handwriting.

Original statements from teachers concerning handwriting

Would you like to add something concerning learning to write / handwriting? Open response

“Learning becomes more difficult because pupils have a hard time reading their own handwriting.”

(Secondary school teacher, North Rhine-Westphalia, 45–54 years)

“Lots of pupils arrive from primary school having not learned how to hold a pen or what movements are necessary when writing. They write numbers and letters with very inefficient and unergonomic movements. This makes a fluent and fast writing style impossible.”

(Secondary school teacher, Hesse, >54 years)

“Children enjoy working creatively with handwriting but increasingly have difficulty writing longer texts because they lack stamina and concentration.”

(Primary school teacher, Bavaria, 45–54 years)

“I notice in primary school that many children arrive holding their pens the wrong way.”

(Primary school teacher, Baden-Württemberg, >54 years)

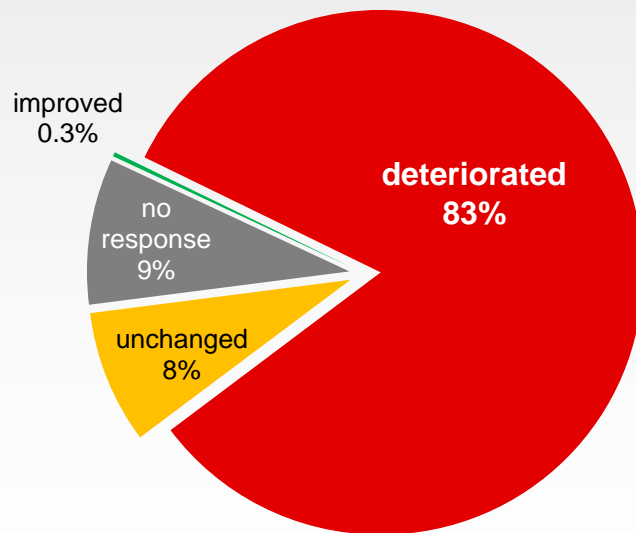
A clear negative development in handwriting and the skills required.

Assessment of changes in recent years

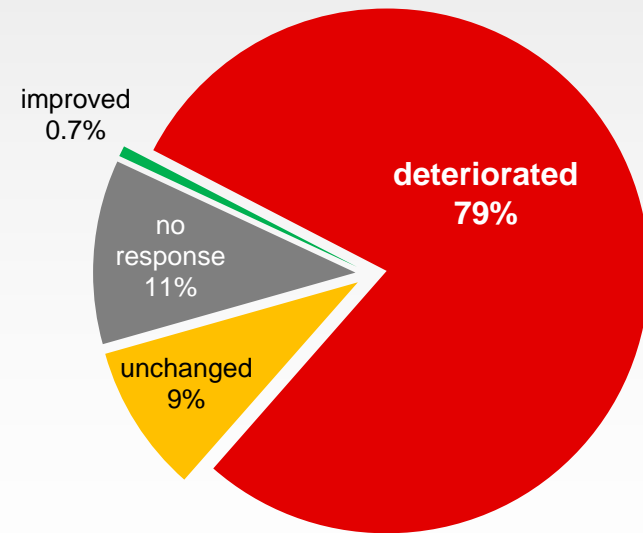
How have the skills that pupils require for handwriting development changed in the last few years...?

On average, what changes have there been to pupils' handwriting in the last few years...?

Primary school



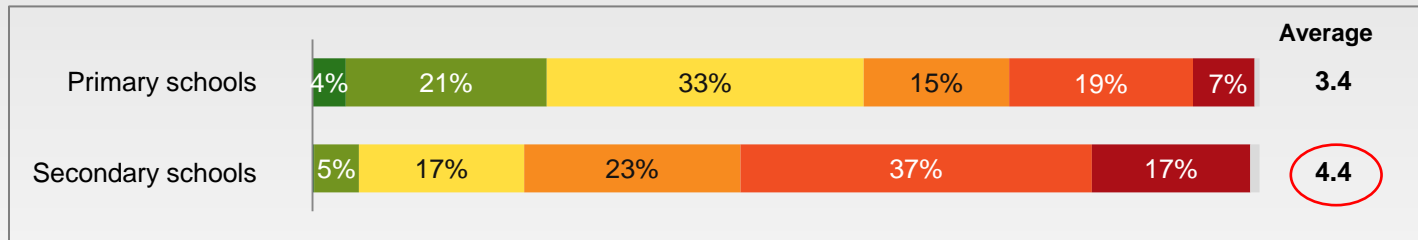
Secondary schools



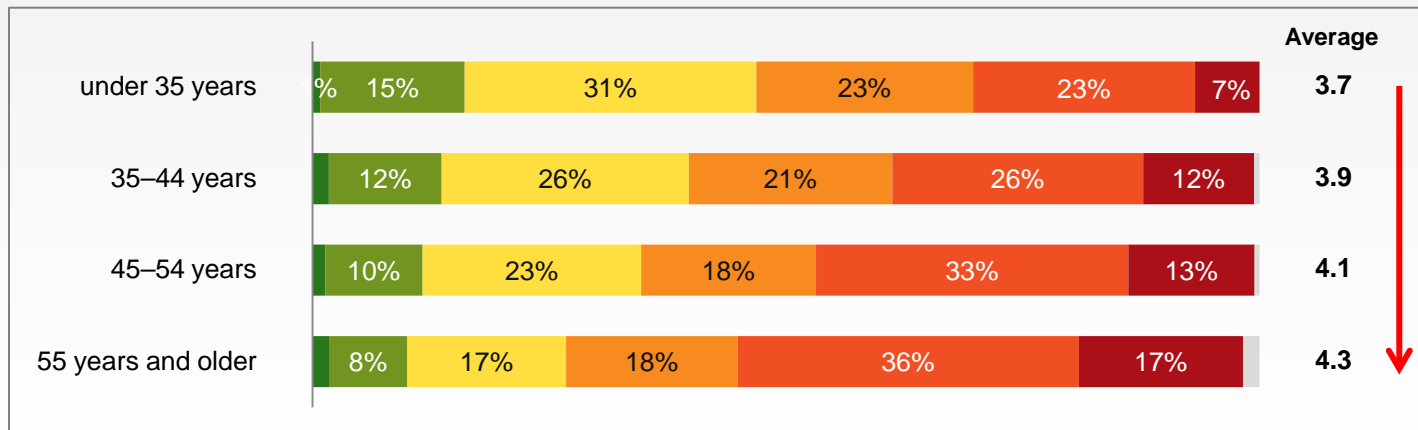
In secondary schools, the problem is becoming more acute.

Satisfaction with pupils' handwriting

How satisfied are you with (the development of) your pupils' handwriting?



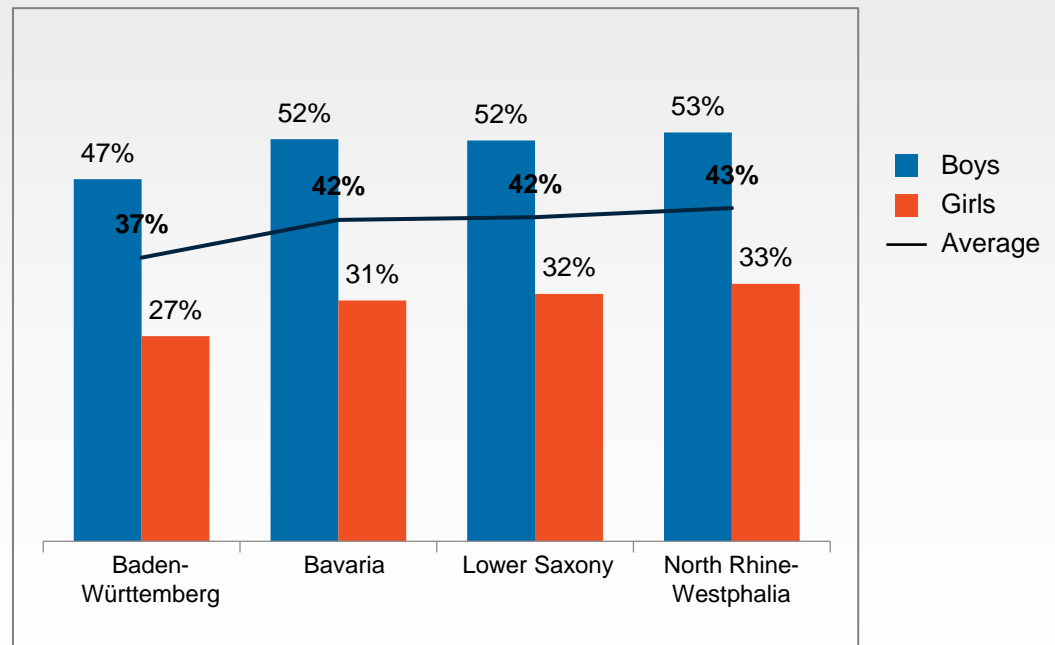
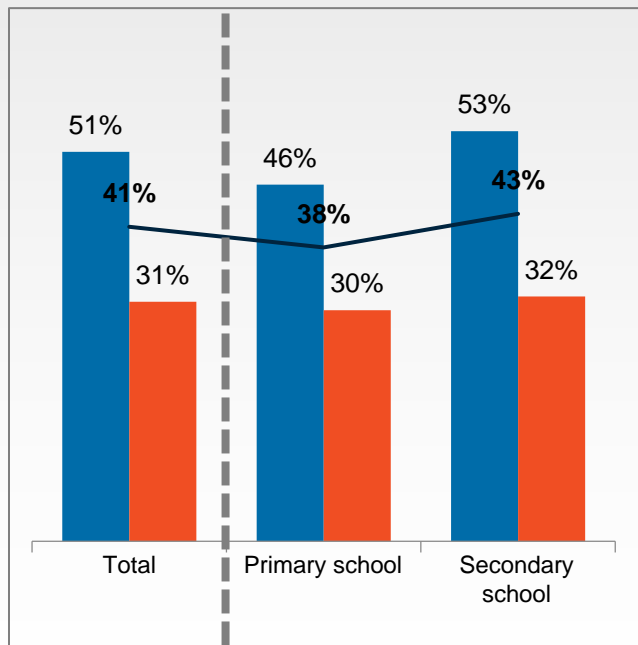
- 1 = very satisfied
- 2 = satisfied
- 3 = reasonably satisfied
- 4 = marginally satisfied
- 5 = not satisfied
- 6 = not at all satisfied
- No response



51% of boys and 31% of girls have problems with handwriting.

Proportion of school pupils with handwriting problems

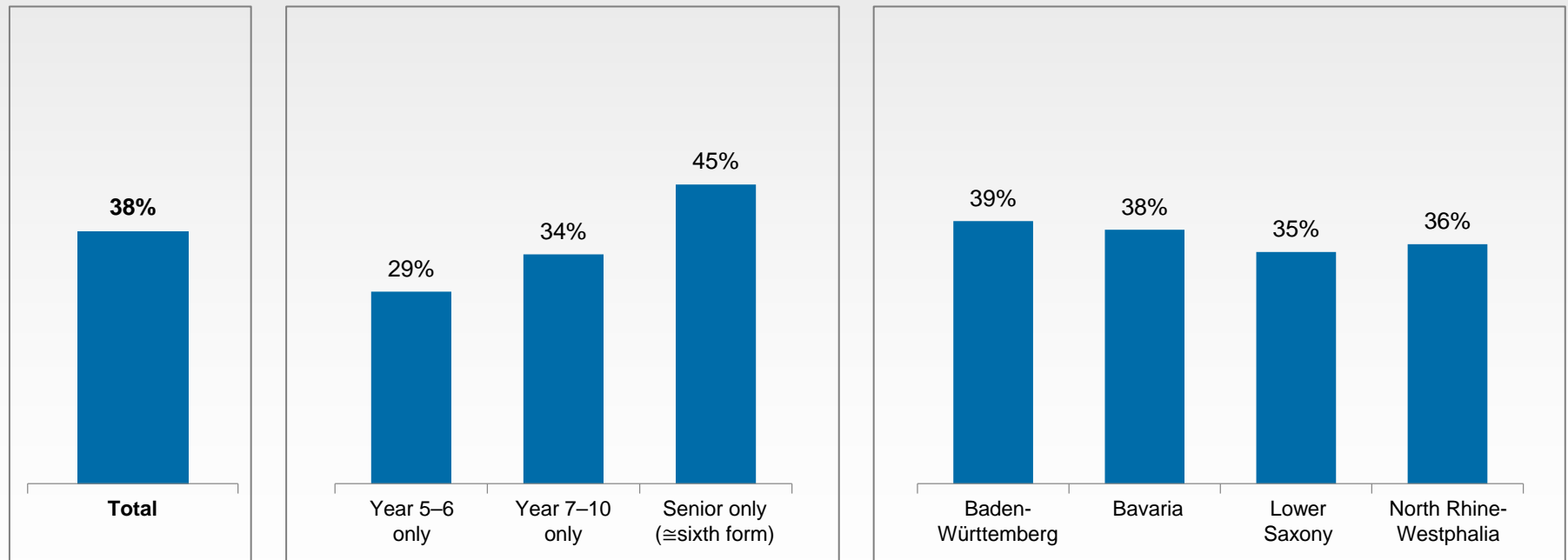
In your opinion, what percentage of school pupils have problems developing fluent and legible handwriting? / In your opinion, what percentage of your pupils have problems producing fluent and legible handwriting? Please differentiate between male and female pupils.



Almost two thirds are unable to write at length without problems.

Ability to write problem-free for at least 30 minutes

What percentage of your pupils can write for 30 minutes and longer without problems (e.g. cramp/hand fatigue, illegibility, etc.)?

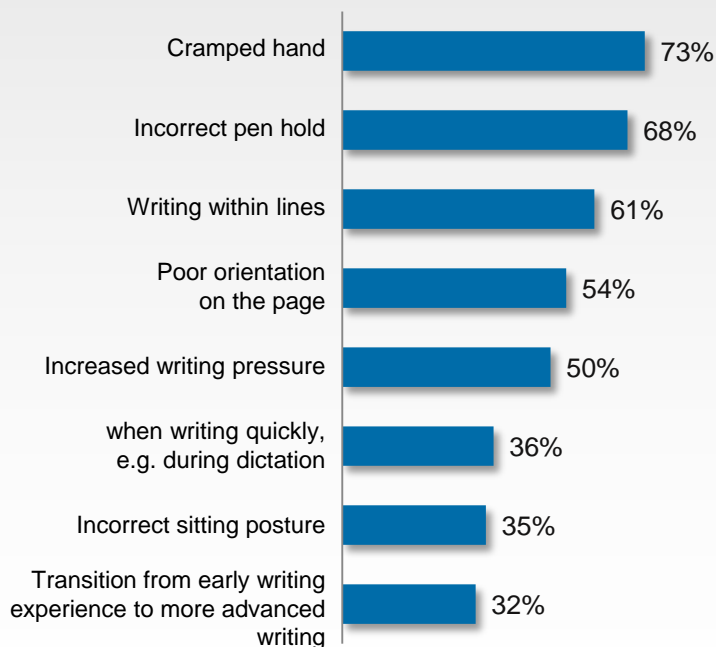


Teaching objectives in danger: greatest problems are illegible and slow writing

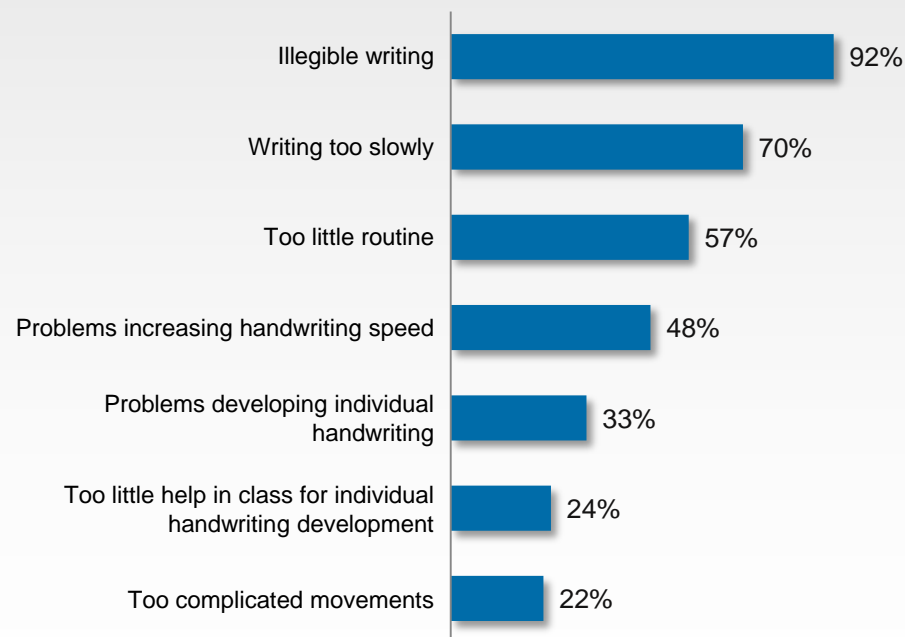
Concrete problem potential

In what particular area do you observe the greatest problems for your pupils? (multiple responses possible)

Primary school



Secondary schools

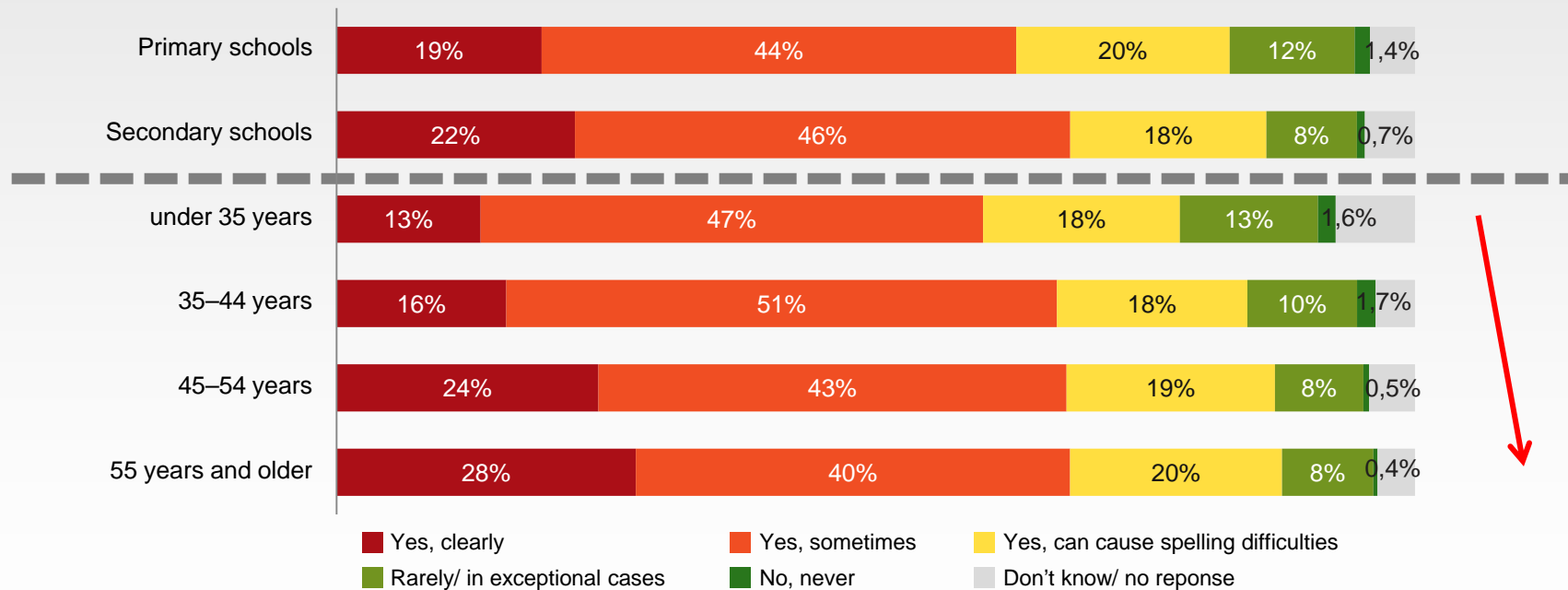


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The better a pupil's handwriting, the better their general school performance tends to be.

Link between handwriting and school performance

Do you see a link between handwriting and school performance?



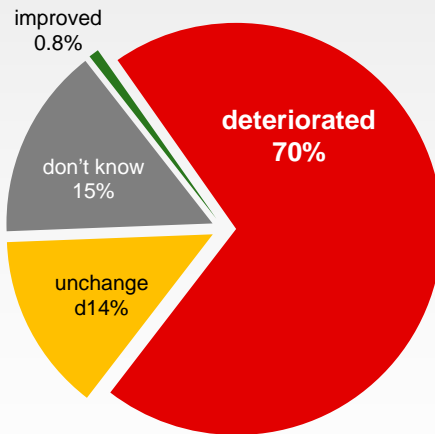
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Regardless of the type of school, 87% of teachers observe a deterioration in graphomotor skills.

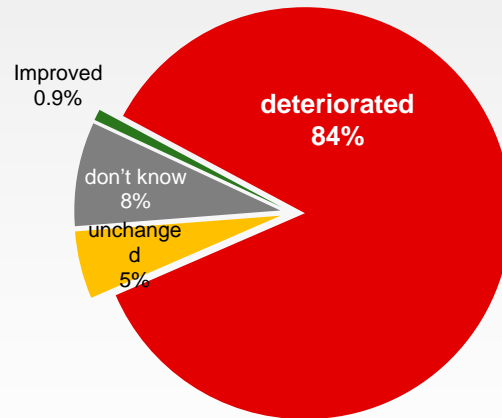
Motor skills compared to before

How have your current pupils' general motor skills developed compared with previous pupils?

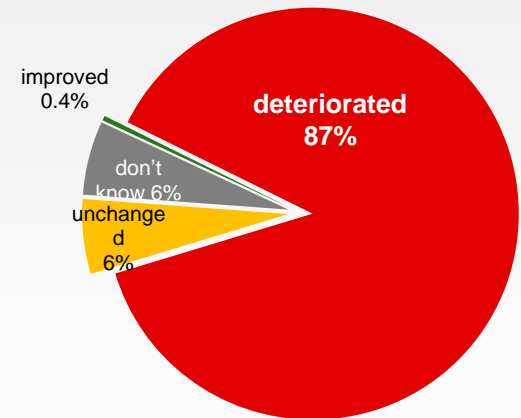
Gross motor skills



Fine motor skills



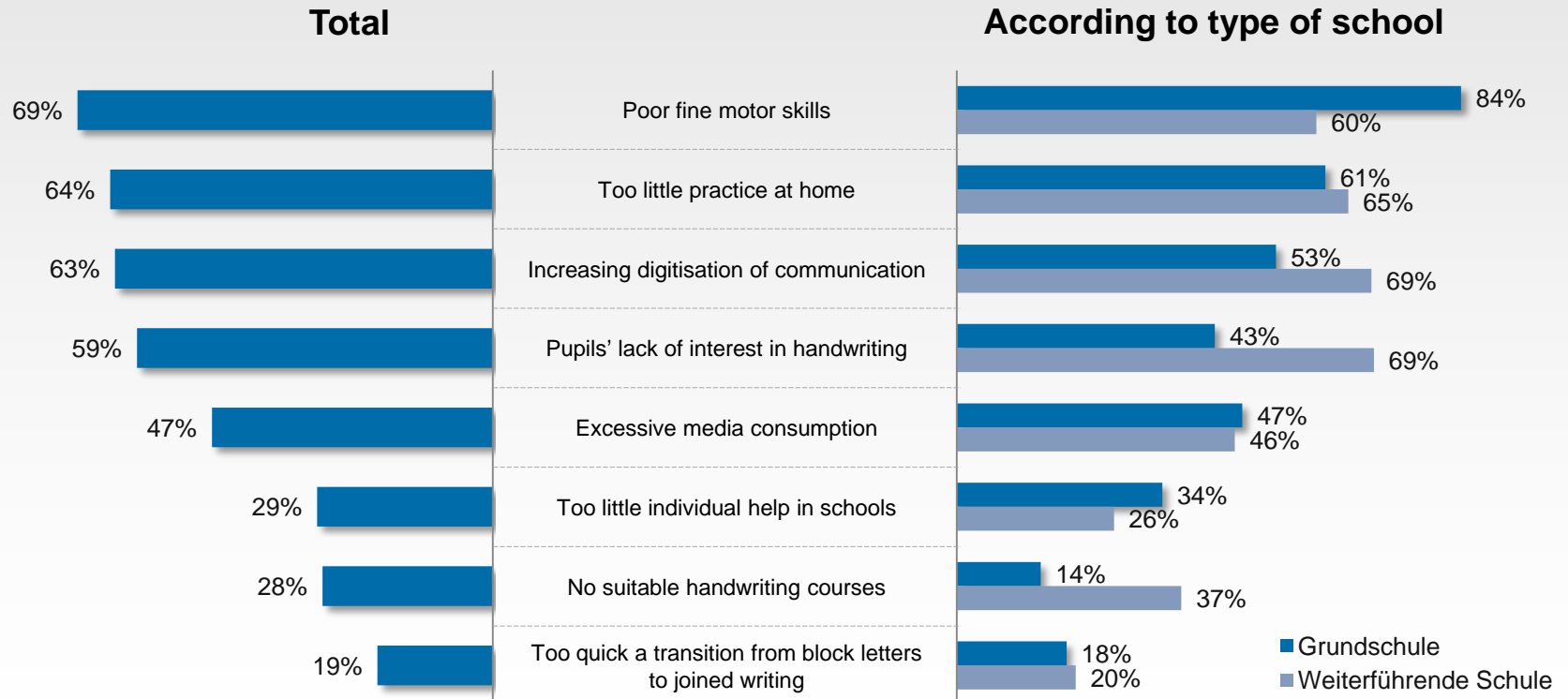
Graphomotor skills



Motor deficiencies are the main cause.

Reasons for problems with handwriting

In your opinion, why is it that pupils have trouble with handwriting? (multiple responses possible)

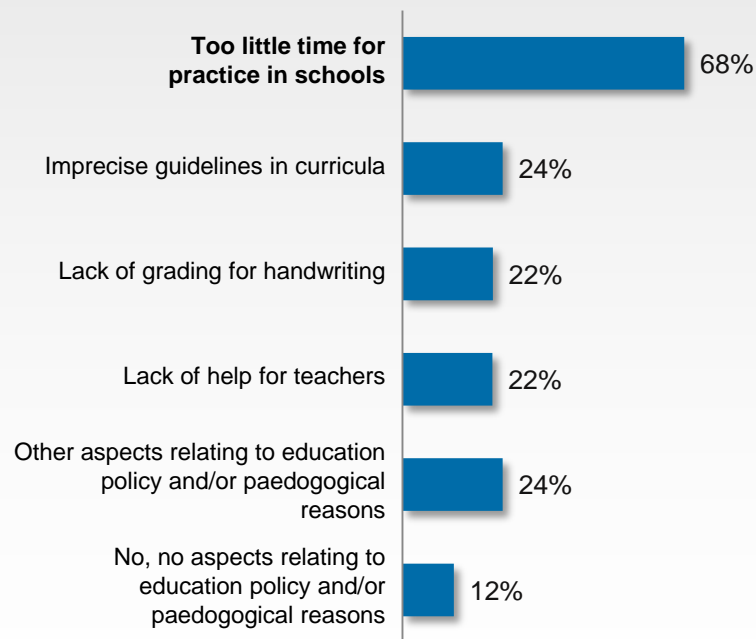


Reasons linked to education policy, and lack of time for practice in particular, are relevant.

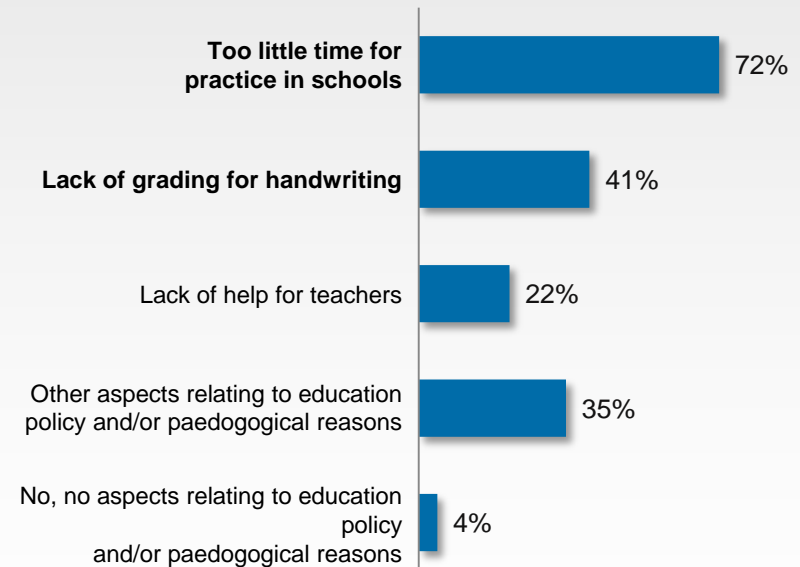
Relevance of education policy/ paedagogical reasons

If pupils have trouble with handwriting, is this also caused by aspects relating to education policy and/or paedagogical reasons? (multiple responses possible)

Primary school



Secondary schools



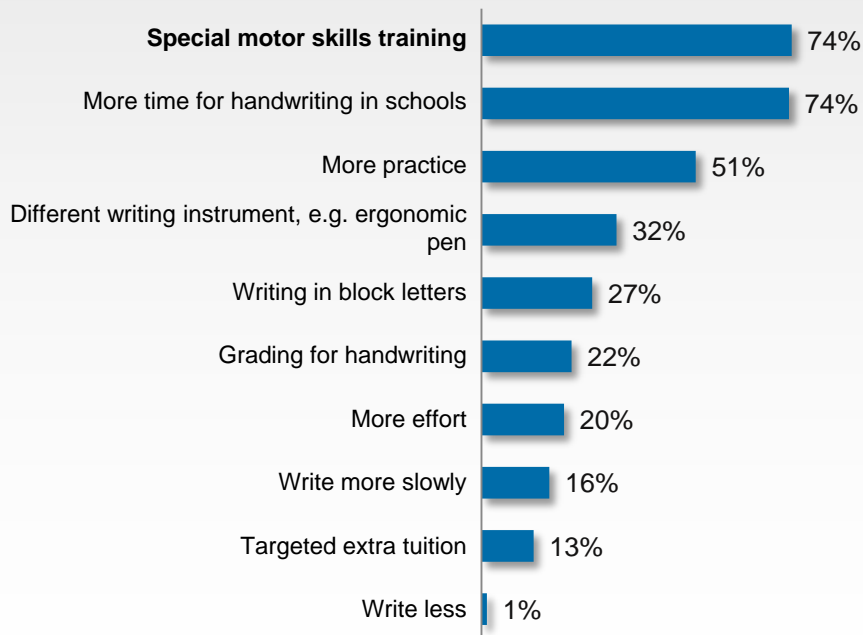
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Three quarters of primary school teachers, and as many as 61% of secondary school teachers call for special motor skills writing courses.

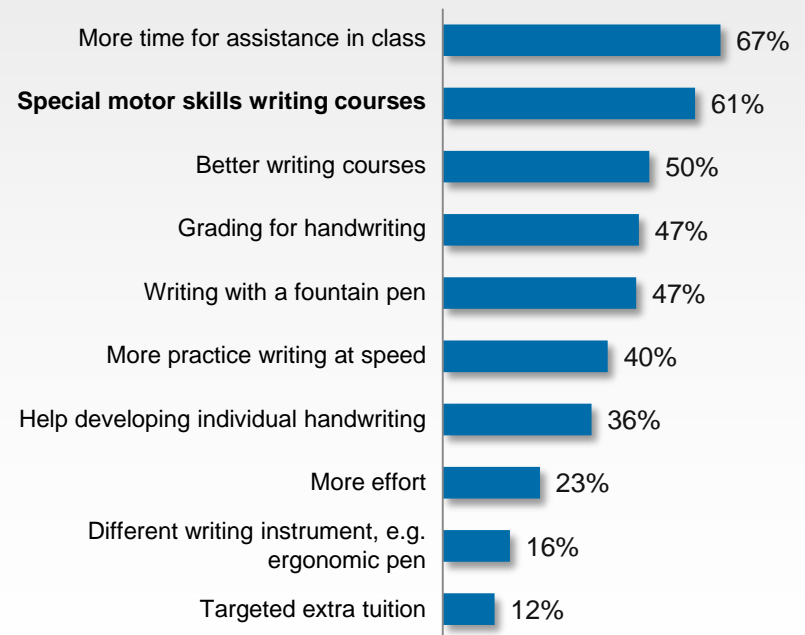
Possible courses of action for illegible handwriting in primary schools

In your opinion, what can be done to combat illegible handwriting (in primary schools)? (multiple responses possible)

Primary school



Secondary schools



Possible courses of action for illegible handwriting

Original statements from teachers concerning handwriting

Would you like to add something concerning learning to write / handwriting? Open response

"I wish that pupils in primary school were given more time to work on motor skills and correct pen hold, as I believe that the time spent practising this at home has decreased in recent years. Motivation could be increased with a 'pencil driving licence', for example."

(Primary school teacher, Baden-Württemberg, 25–34 years)

"I have been looking for years in vain for ways to help pupils, and in particular boys, at secondary school to develop handwriting that is individual, properly legible and easy to use. I don't have the time or suitable practice material."

(Secondary school teacher, North Rhine-Westphalia, >54 years)

"It would be nice to have dedicated handwriting classes back in the timetable."

(Secondary school teacher, Bavaria, 25–34 years)

"I think this topic should be viewed holistically. All people working in education must be on the same page. One sticking point is in pre-school institutions, who do not pay attention to correct pen hold from the very start and do not explain to parents the need for support."

(Primary school teacher, North Rhine-Westphalia, >54 years)

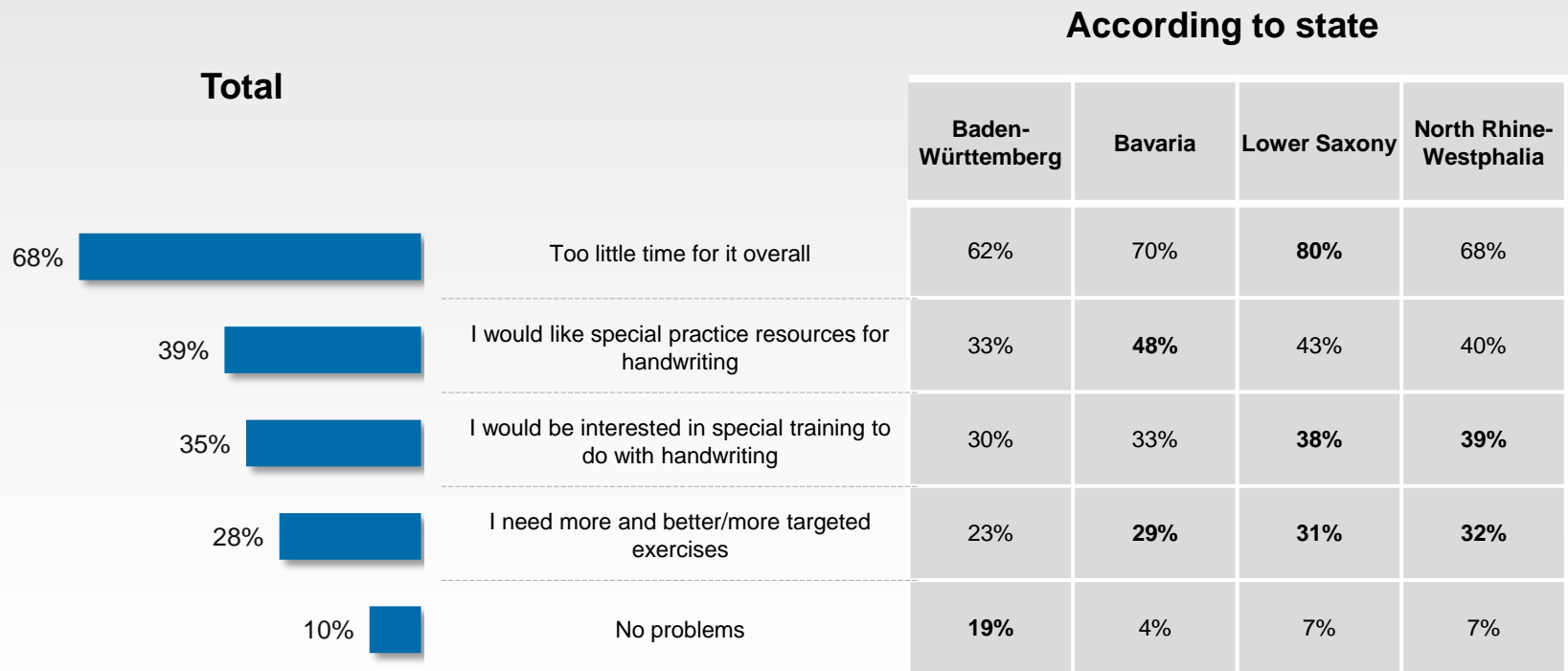
"It's always been the case that year 5 pupils begin their grammar school careers writing slowly. That's normal. What has been lacking for some time, though, is targeted help (and sufficient time) for us secondary school teachers to work on children's handwriting."

(Secondary school teacher, Rhineland-Palatinate, 45–54 years)

Primary school teachers would like more time, practice resources and training.

Primary school teachers' experiences with writing lessons in schools

What are your experiences of writing lessons in schools? (multiple responses possible)



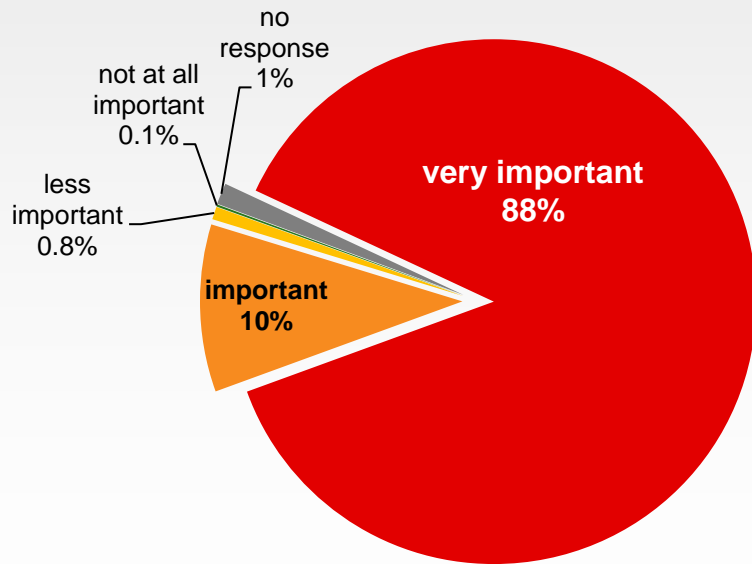
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Learning to write by hand is (very) important for 98%.

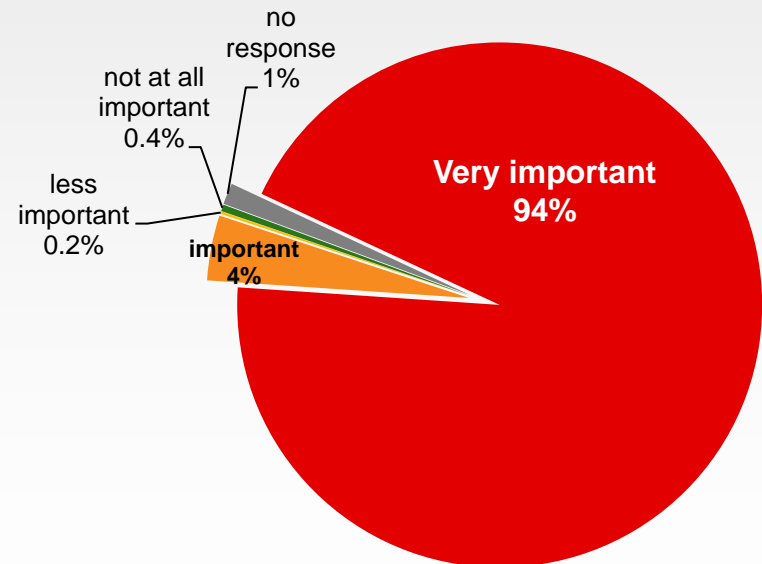
Assessment of the importance of learning to write by hand

How important do you consider it that children (years 1–4) learn to write by hand these days? / How important do you consider writing by hand to be?

Primary school



Secondary schools

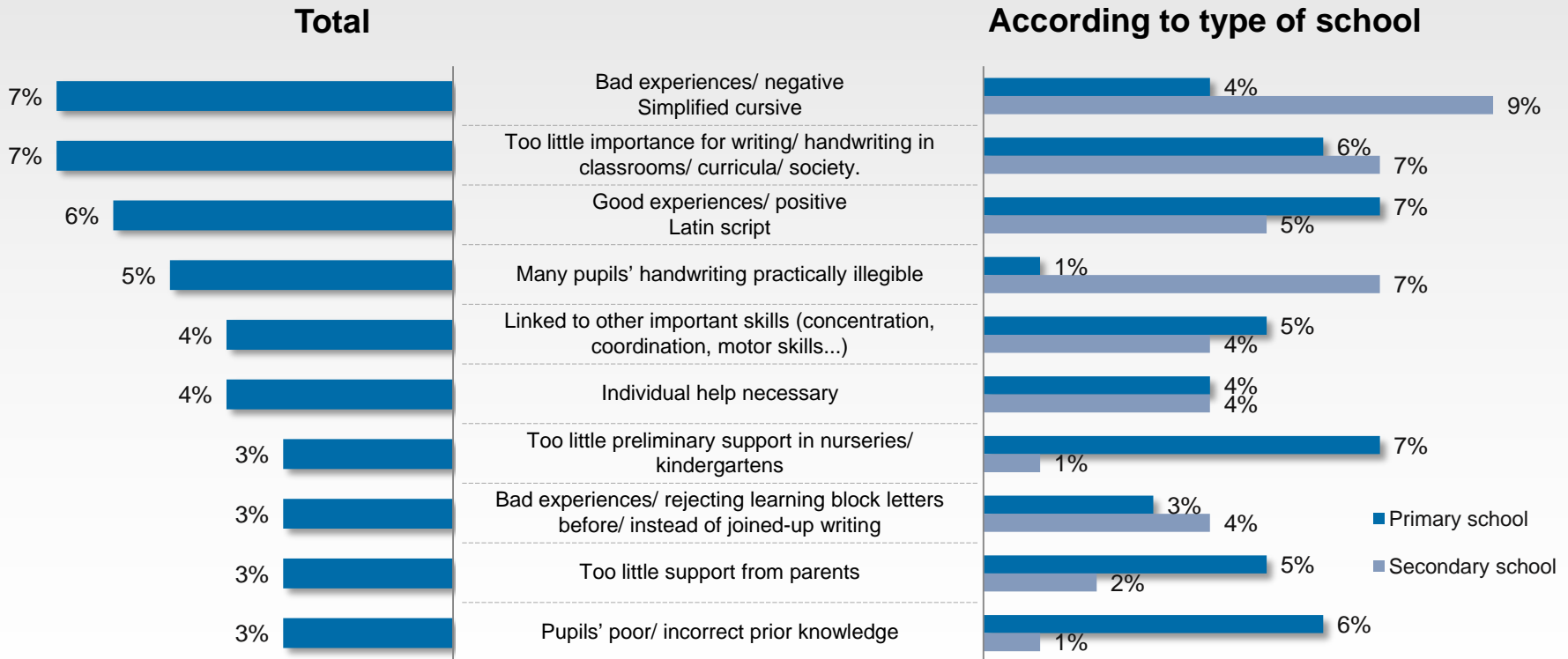


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Script dilemma and lack of appreciation for handwriting.

Further comments on learning to write / handwriting (top 10 open entries)

Would you like to add something concerning learning to write / handwriting?



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Clear problems with handwriting

Problem description

- A clear negative development in handwriting and the skills required.
- In secondary schools, the problem is becoming more acute.
- 51% of boys and 31% of girls have problems with handwriting. Almost two thirds of pupils in secondary schools are not able to write at length without problems.

Effects on general performance at school

- The better a pupil's handwriting, the better their general school performance tends to be.

Causes

- Regardless of the type of school, 87% of teachers observe a deterioration in graphomotor skills.
- Reasons linked to education policy, and lack of time for practice in particular, are relevant.

Possible courses of action

- Three quarters of primary school teachers, and as many as 61% of secondary school teachers call for special motor skills writing courses.
- Primary school teachers would like more time, practice resources and training.

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