

What do principals and students say?

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17.8.2009, Iceland

The results are presented in tables and figures from selected items. The items are referred using their PISA identification index. The data have been taken from www.pisa.oecd.org and converted to SPSS files, one for students and one for principals. Only Nordic countries have been analysed but adding, when suitable, also OECD means for reference.

Answers are facts and opinions. They have been taken here as such without an independent evaluation of the validity, or of the normative 'truth' of the answers (teachers should obey the official ways)

School and principal level -
one answerer for one school,
separate PISA data file available

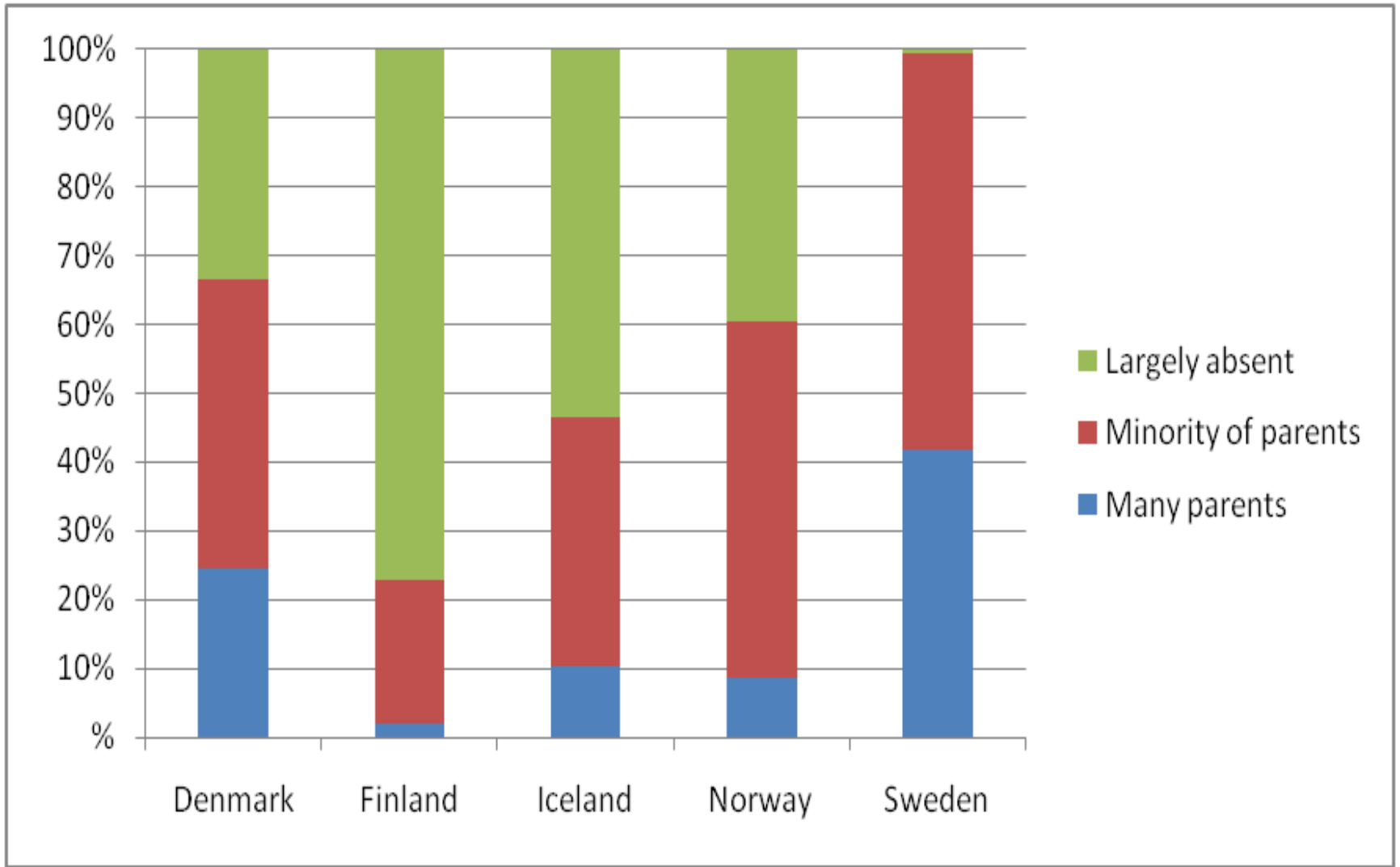
Parents pressure on academic standards, item SC16Q1:

Which statements below best characterises parental expectations towards your school?

There is constant pressure from *many parents*, who expect our school to set very high academic standards and to have our students achieve them;
pressure on the school to achieve higher academic standards among students comes from a *minority of parents*;

pressure from parents on the school to achieve higher academic standards among students is *largely absent*

Country * Parent pressure academic standards Q16 Crosstabulation



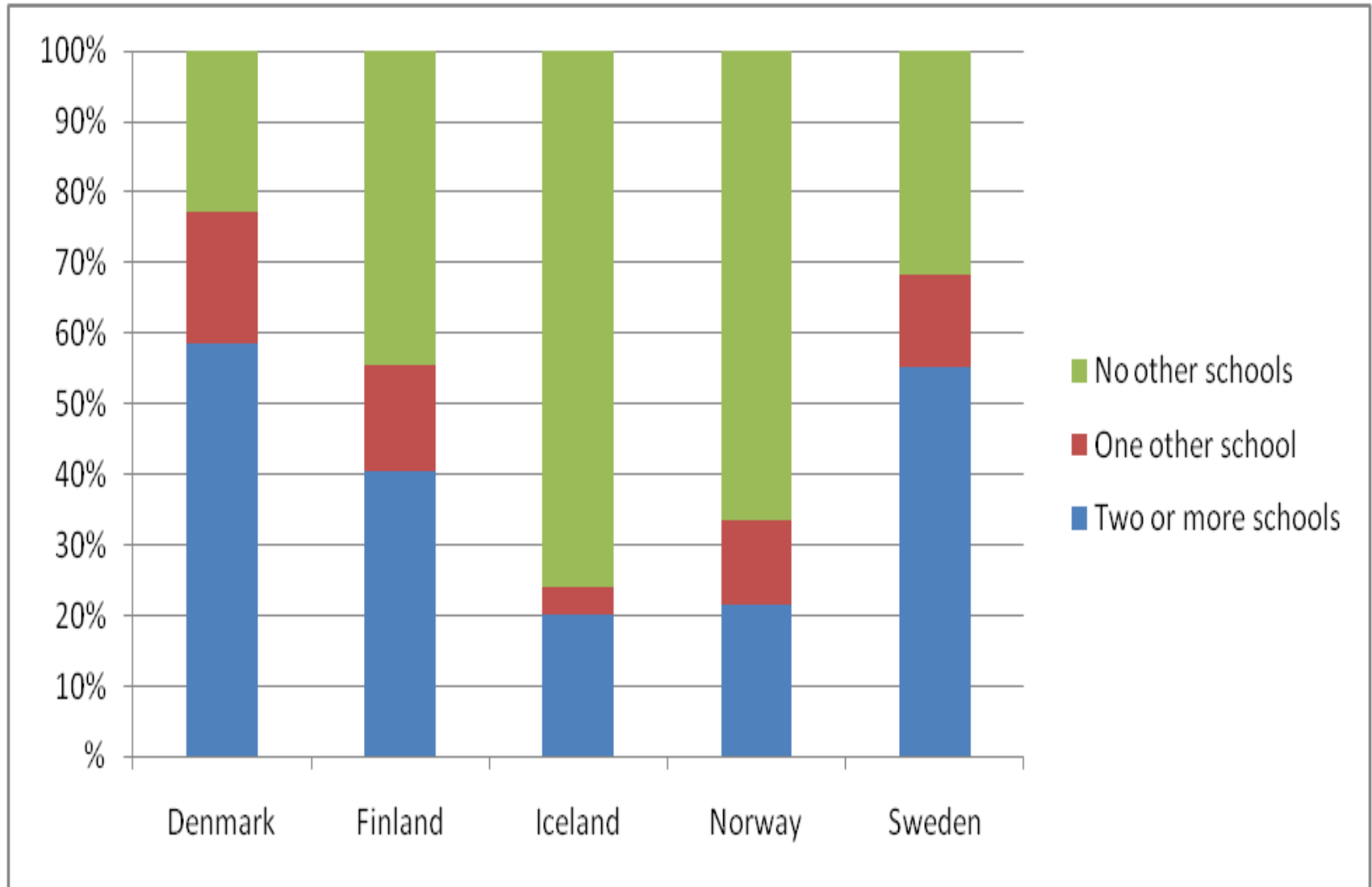
Schooling available, SC18Q01:

We are interested in the options parents have when choosing a school for their children.

Which of the following statements best describes the schooling available to students in your location?

There are two or more schools in this area that compete for our students,
there is one other school in this area that competes for our students,
there are no other schools in this area.

Country * Schooling available Q18 Crosstabulation



Admittance, role of residence, SC19Q01:

How much consideration is given to the following factors when students are admitted to your school?

Alternatives: prerequisite, high priority, considered, not considered;

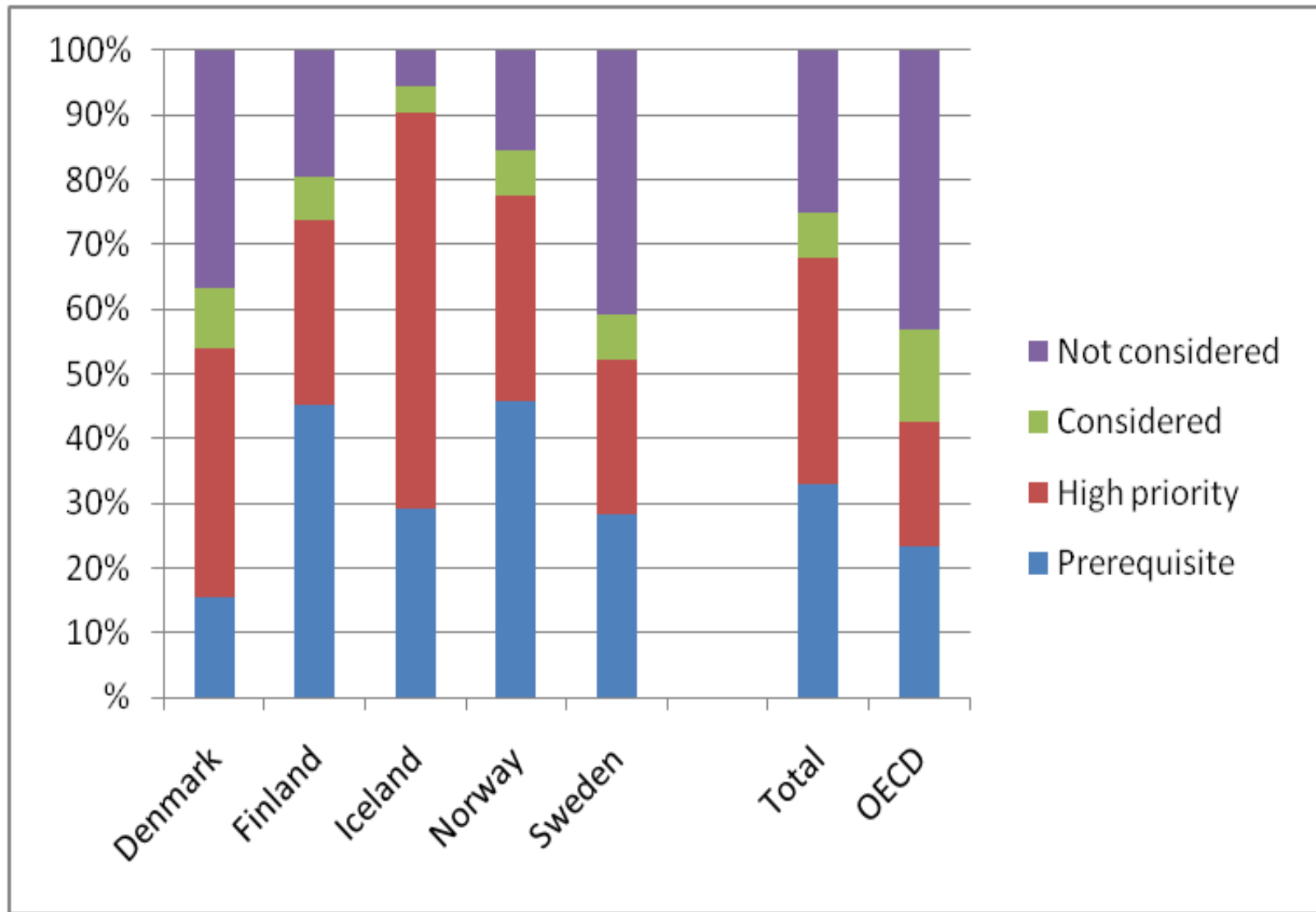
residence in a particular area, student's academic record,

recommendation of feeder schools,

parents' endorsement of the instructional or religious philosophy of the school,

student's need or desire for a special programme, attendance of other family members at the school.

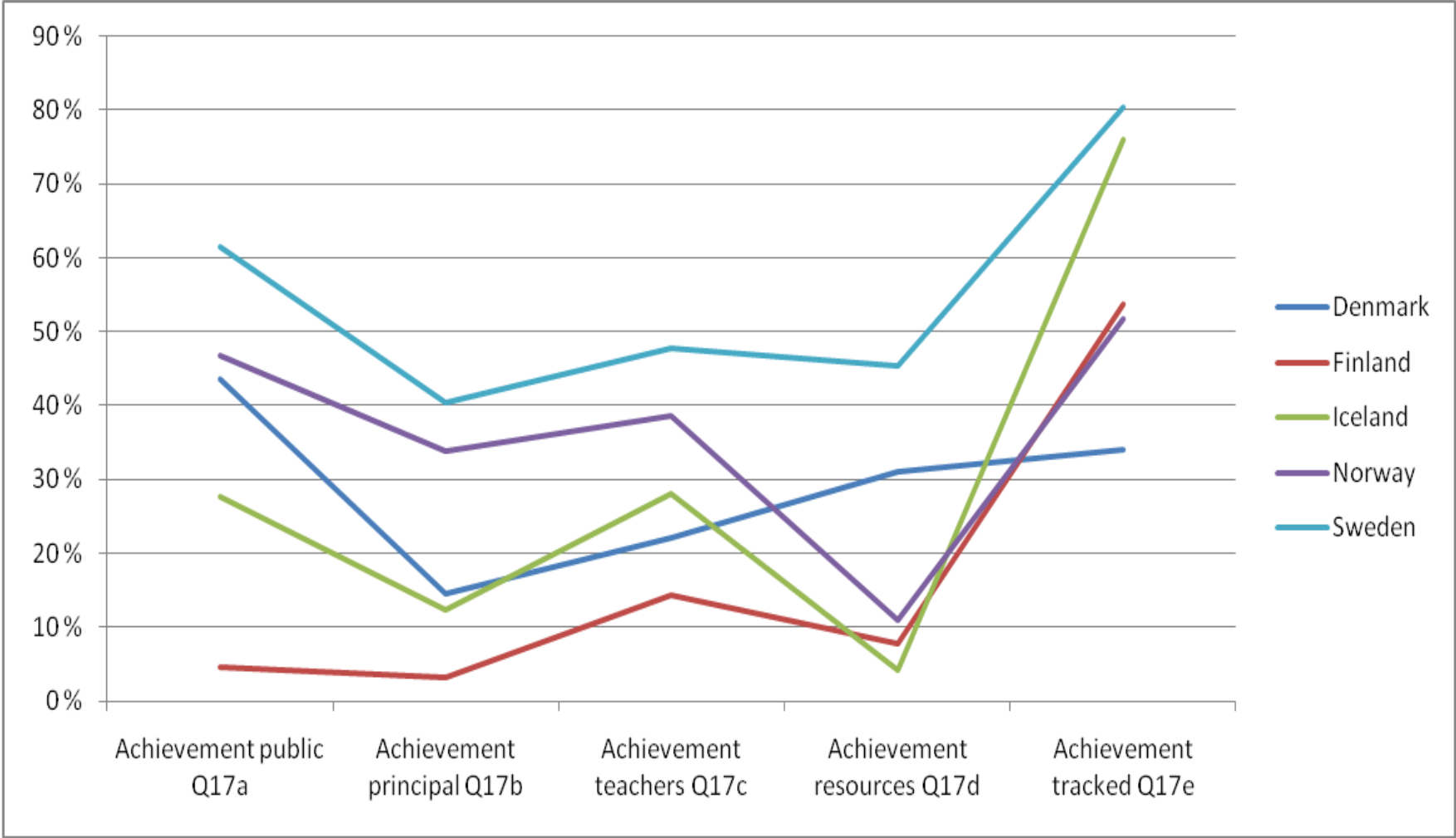
Country * Admittance residence Q19a Crosstabulation



In your school, are achievement data used in any of the following (SC17Q01-05):

- a - are posted publicly (e.g. in the media),
- b - in evaluation of the principal's performance,
- c - in evaluation of teachers' performance,
- d - in decisions about instructional resource allocation to the school,
- e - are tracked over time by an administrative authority?

Report information is used for



Streaming used in between classes, SC08Q01:

Some schools organise instruction differently for students with different abilities.

What is your school's policy about this for students,

- a) students are grouped by ability into different classes,
- b) students are grouped by ability within their classes -

Country* Streaming between classes (Q8a Crosstabulation)

	in all	in some	in no subject		
Denmark	1%	13%	85%	100%	149
Finland	0%	32%	68%	100%	148
Iceland	2%	19%	79%	100%	119
Norway	0%	9%	91%	100%	171
Sweden	4%	33%	63%	100%	177
Total	1%	22%	77%	100%	764
OECD	10%	39%	50%	100%	

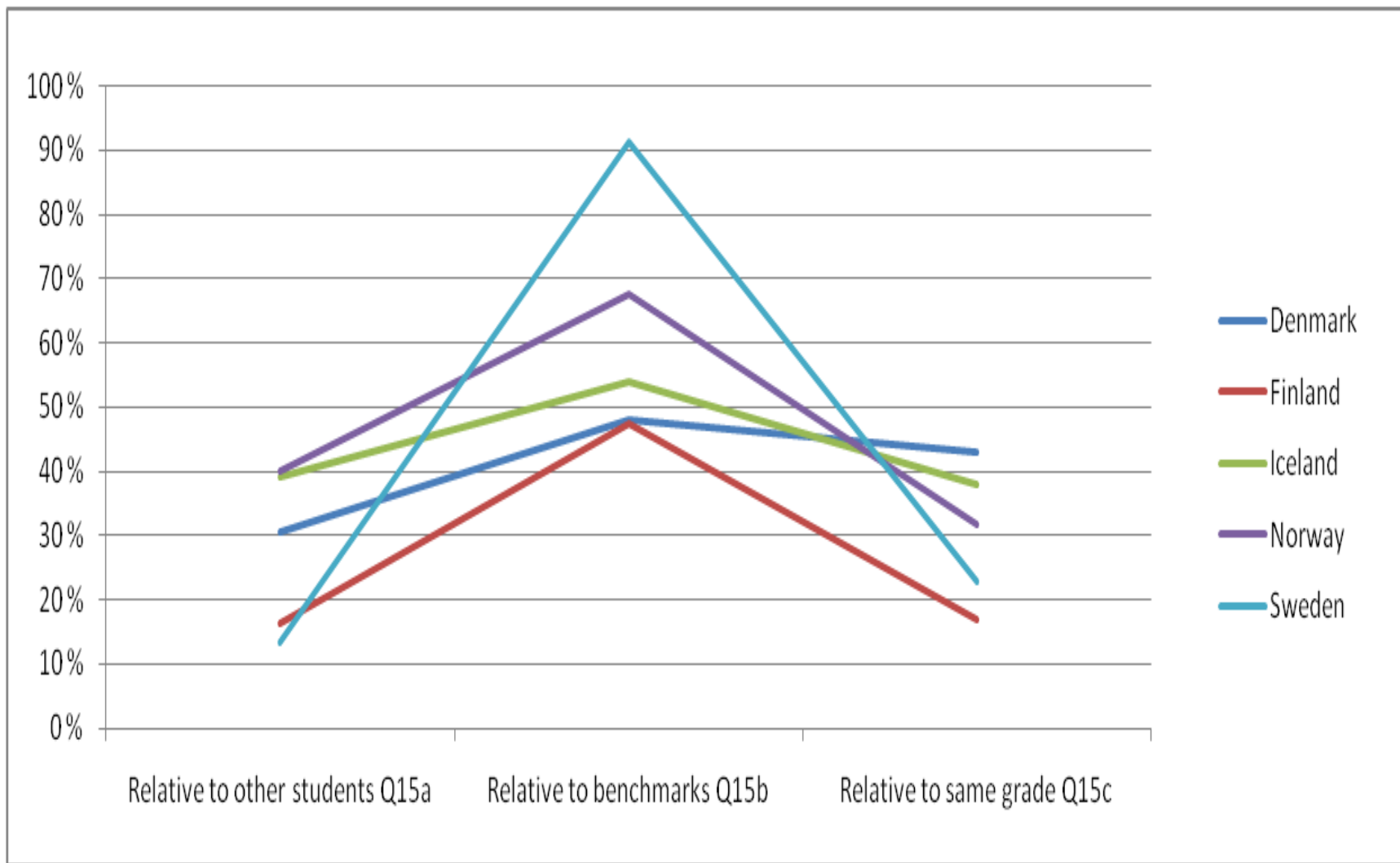
Country* Streaming within classes (Q8b Crosstabulation)

	In all	in some	in no subject	
Denmark	7%	74%	20%	167
Finland	3%	32%	65%	149
Iceland	4%	60%	36%	122
Norway	4%	36%	61%	194
Sweden	3%	60%	37%	186
Total	4%	52%	44%	818
OECD	8%	46%	46%	

Information for parents is provided (SC15)

- a - in relation to other students (SC15Q01) in the same school,
- b - to national or regional benchmarks (SC15Q02) or
- c - relative to students in the same grade in other schools (SC15Q03).

Report is given in relation to



*Country * Shortage science teachers (Q14a Crosstabulation)*

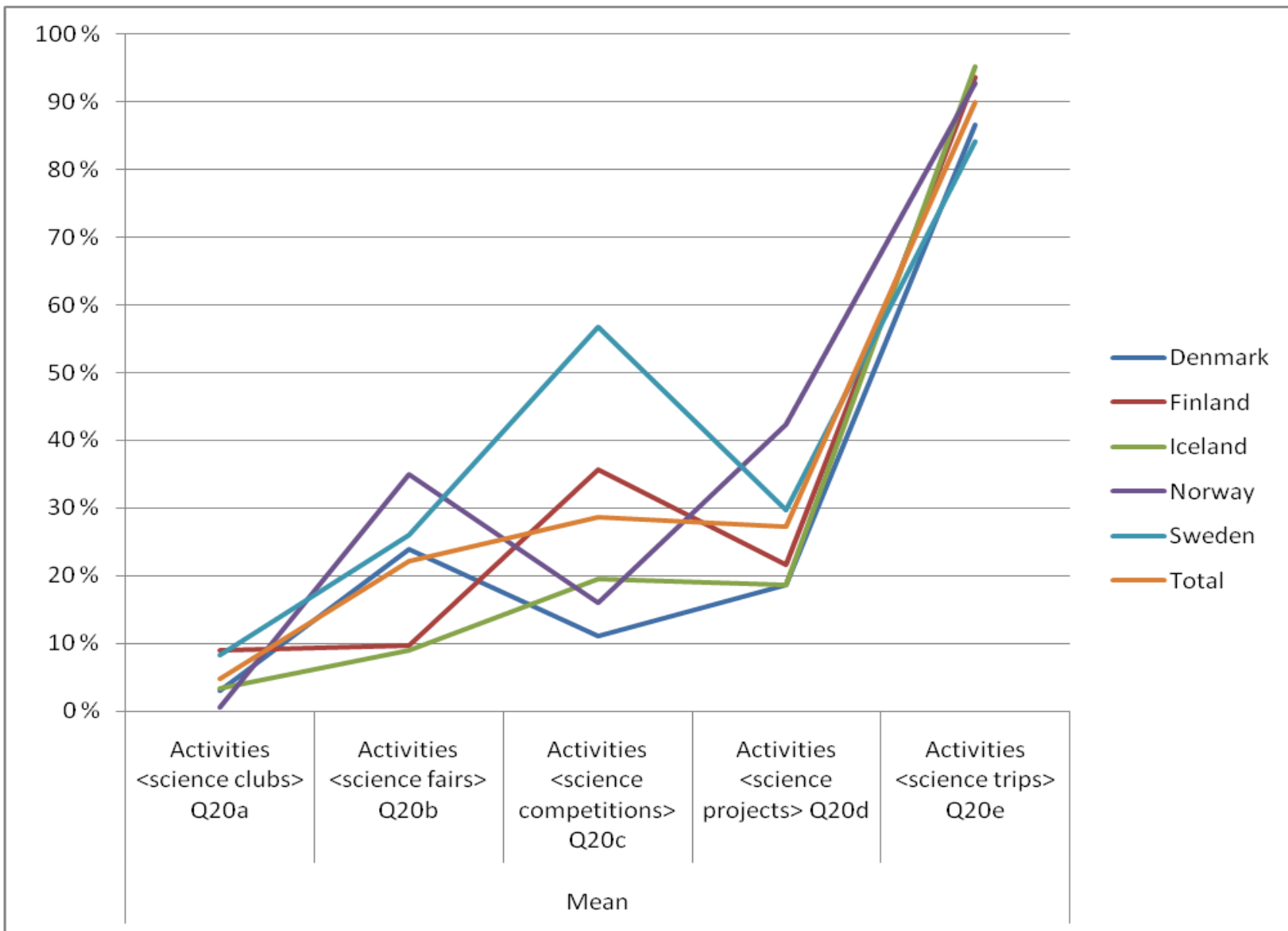
	Not at all	Very little	To some extent	A lot
Denmark	50%	27%	22%	1%
Finland	82%	15%	3%	0%
Iceland	47%	19%	25%	9%
Norway	39%	39%	21%	1%
Sweden	78%	14%	7%	1%
Total	60%	23%	15%	2%
OECD	61%	21%	15%	3%

Country * Shortage Internet Q14j Crosstabulation

	Not at all	Very little	To some extent	A lot
Denmark	44%	40%	15%	1%
Finland	47%	35%	16%	2%
Iceland	63%	25%	9%	2%
Norway	36%	37%	23%	3%
Sweden	63%	24%	11%	3%
Total	50%	32%	15%	2%
	52%	27%	16%	6%

Country * Shortage science lab equipment Q14g Crosstabulation

	Not at all	Very little	To some extent	A lot
Denmark	22%	44%	25%	9%
Finland	15%	42%	33%	10%
Iceland	10%	21%	40%	28%
Norway	15%	28%	42%	15%
Sweden	40%	31%	24%	5%
Total	22%	33%	32%	13%
OECD	28%	29%	29%	14%



Student-level

Pattern Matrix^a

	Factor			
	1	2	3	4
Learning - Experiments Q34b	,845			
Learning - Draw conclusions Q34f	,586			
Learning - Follow instructions Q34n	,579			
Learning - Design for lab Q34c	,530			
Learning - Demonstrations Q34j	,399			
Learning - Apply everyday Q34d	,263			
Learning - Student opinion Q34e		-,849		
Learning - Student ideas Q34a		-,644		
Learning - Discussion Q34m		-,381		,278
Learning - Choose own Q34k			,668	
Learning - Test ideas Q34p			,629	
Learning - Own experiments Q34h			,563	
Learning - Class debate Q34i			,271	
Learning - Explain relevance Q34o				,753
Learning - Society relevance Q34q				,589
Learning - World outside Q34l				,565
Learning - Different phenomena Q34g				,407

Extraction Method: Maximum Likelihood.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 13 iterations.

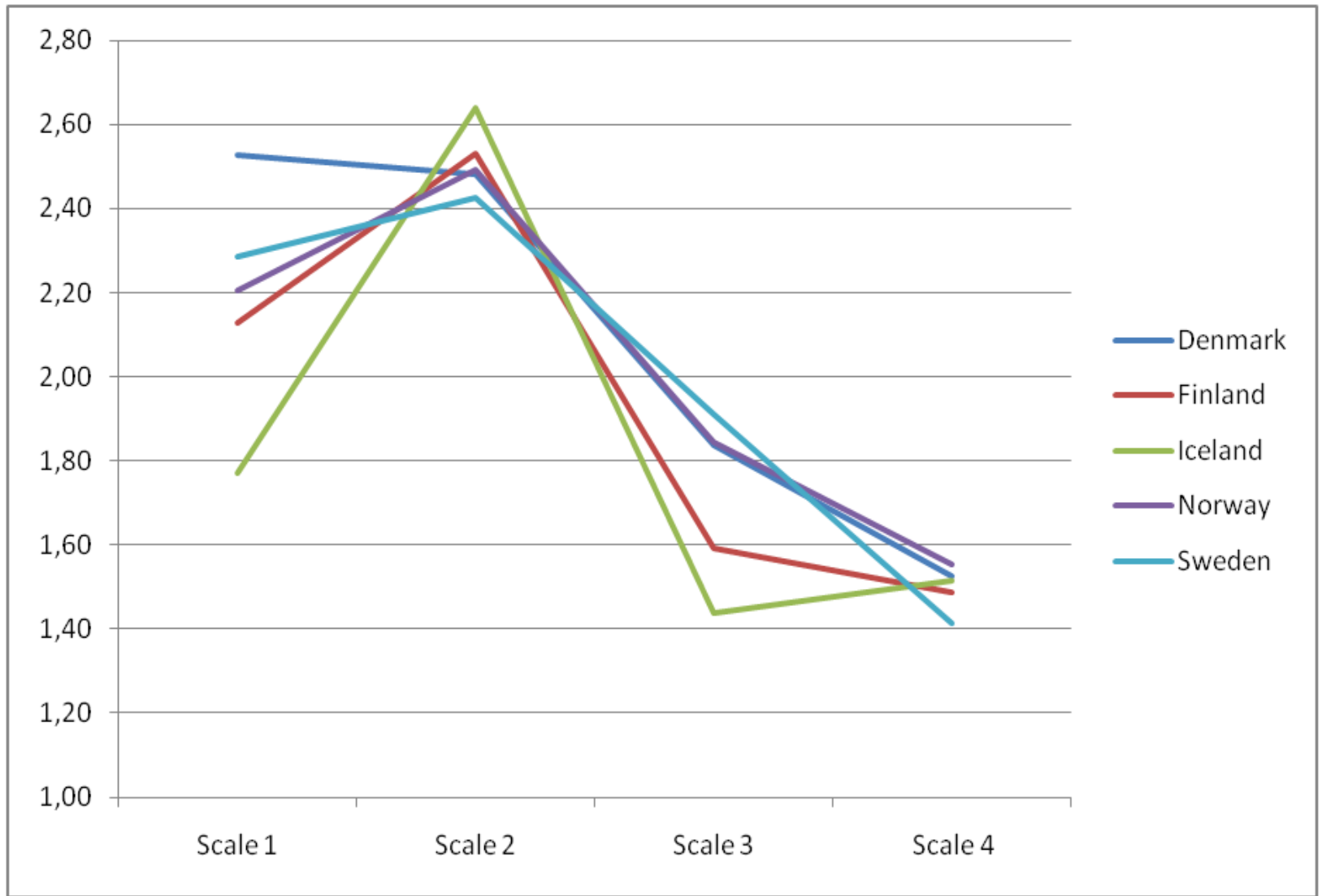
Extraction Sums of Squared Loadings		
Total	% of Variance	Cumulative %
5,6	33	33
1,1	7	40
0,7	4	44
0,6	4	47

Scale 1 - **Science-teaching**, which follows the traditions of science education, where experiments and scientific reasoning are emphasised.

Scale 2 - **Student-centred teaching** where their opinions and ideas as well as sharing of these are emphasised.

Scale 3 - **Activation** and planning and running own experimentation is emphasised.

Scale 4 - **Bridging and applications**, where the connections between school learning and processes outside school are emphasised in order to enhance transfer and consolidation of learned pieces of knowledge and skills to support the idea of relevance.



Science edu Student cent Activation Bridging

**Learning -
Experiments Q34b
SCALE 1**

	All lessons	Most Lessons	Some lessons	Hardly ever
Denmark	10 %	51 %	34 %	5 %
Finland	2 %	20 %	53 %	25 %
Iceland	2 %	5 %	31 %	62 %
Norway	3 %	20 %	62 %	14 %
Sweden	4 %	25 %	57 %	14 %

**Learning -
Student
opinion Q34e
SCALE 2**

	All lessons	Most Lessons	Some lessons	Hardly ever
Denmark	15 %	36 %	36 %	13 %
Finland	11 %	40 %	40 %	10 %
Iceland	24 %	33 %	30 %	13 %
Norway	12 %	34 %	36 %	17 %
Sweden	9 %	32 %	42 %	16 %

**Learning
- Choose
own
Q34k**

	All lessons	Most Lessons	Some lessons	Hardly ever	N
Denmark	1 %	9 %	44 %	45 %	4167
Finland	1 %	6 %	40 %	52 %	4650
Iceland	1 %	4 %	26 %	68 %	3526
Norway	3 %	10 %	29 %	58 %	4505
Sweden	2 %	11 %	41 %	46 %	4241

**Learning - Explain
relevance Q34o
SCALE 4**

	All lessons	Most Lessons	Some lessons	Hardly ever
Denmark	9 %	35 %	46 %	10 %
Finland	6 %	34 %	47 %	13 %
Iceland	15 %	33 %	37 %	15 %
Norway	11 %	31 %	41 %	17 %
Sweden	10 %	32 %	44 %	14 %
Total	10,0%	33,1%	43,1%	13,7%

Self study -Science Q31c

