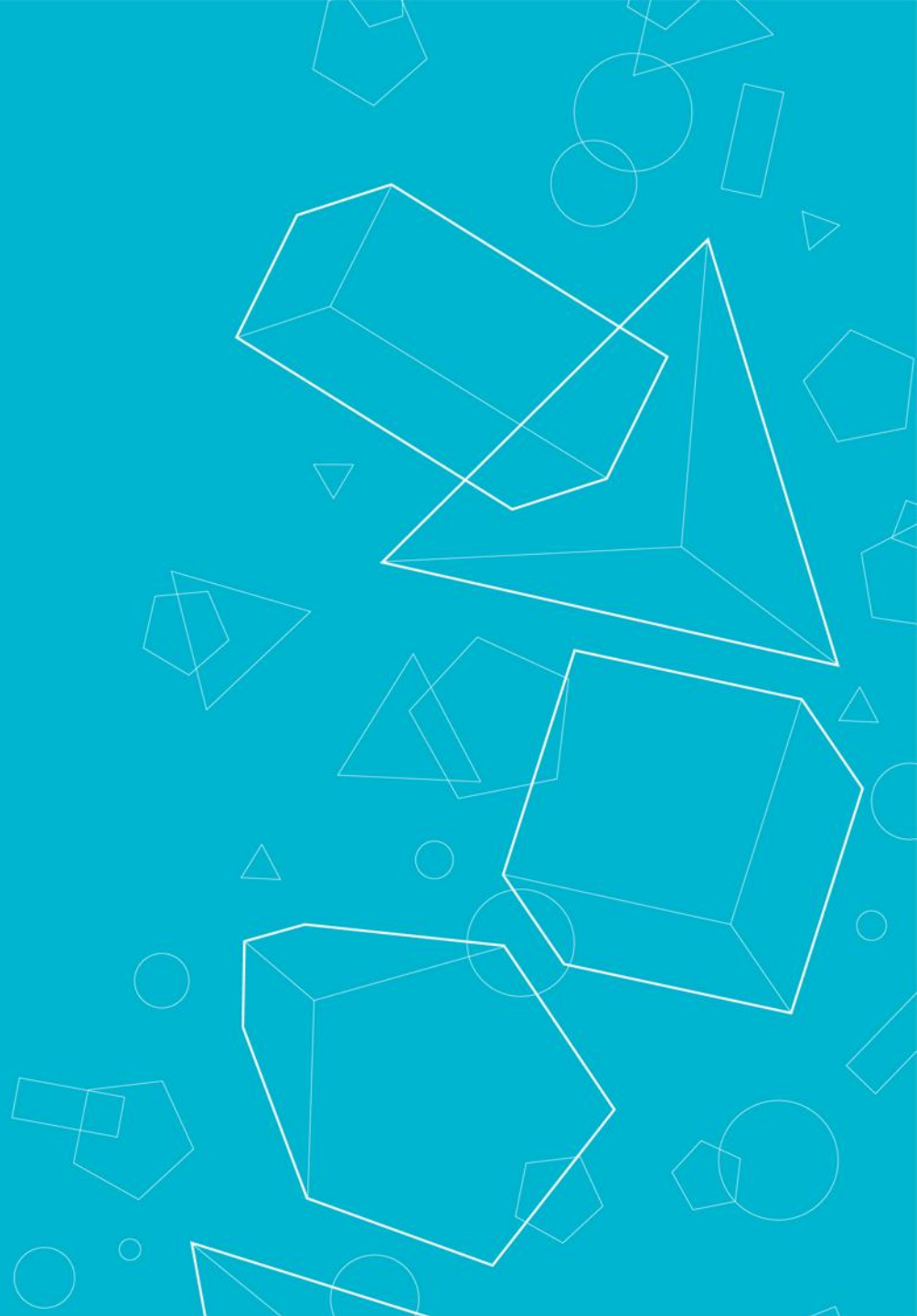


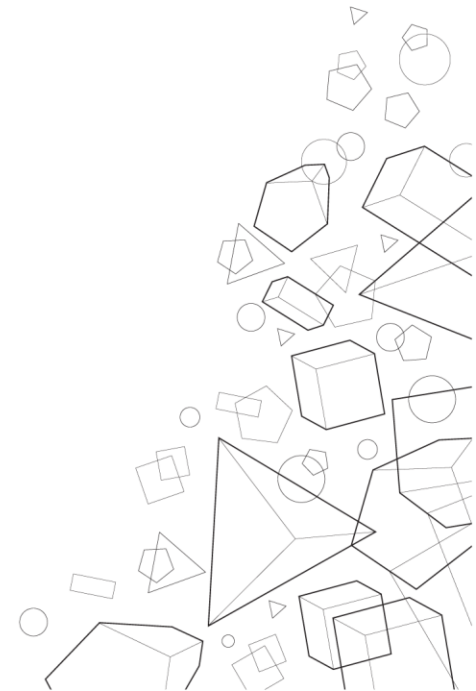
**THE NORWEGIAN
CENTRE FOR
ICT IN EDUCATION**



National policy and R&D activities in Norway

Gréta Björk Guðmundsdóttir, Researcher
greta.gudmundsdottir@iktsenteret.no

**THE NORWEGIAN
CENTRE FOR
ICT IN EDUCATION**



Outline

- *ICT National Policy in Norwegian Education - The Knowledge Promotion Reform*
- *The Norwegian Centre for ICT in Education*
- *The Monitor study- ICT in Norwegian schools*
- *Other R&D activities*



The knowledge promotion reform

- The latest reform regarding the education sector, from 2006.
- It introduces certain changes in substance, structure and organization in the 10-year compulsory school to the last grade in upper secondary education and training.

ICT – one of five basic skills

The ability to use Information and communication technology (ICT) became one of the five basic competences (skills) required in Norwegian schools.

These basic skills are:

1. The ability to express oneself orally,
2. The ability to read,
3. The ability to do arithmetic,
4. The ability to express oneself in writing,
5. The ability to make use of ICT.

These skills are described through competence aims in the curriculum

*We have enough
access and tools
but what about
digital literacy/
competence?*



The Norwegian Centre for ICT in Education

- Our main goals are to **improve the quality** of education and to improve **learning outcomes** and learning for children, pupils and students through use of ICT in education.
- An important task is to contribute to enhanced digital competence for students and teachers regardless of social background and residence.

Monitor – a longitudinal study

- Conducted every other year 2003-2011
- Questionnaires sent to 500 schools
- School leaders, teachers and learners in grade 7, 9 and 12
- Supplemented with a qualitative study



Operational use of ICT	Digital information handling	Digital production	Digital judgment	Digital communication
<p>Be able to use digital equipment, software and data safely and secure. Fostering of typing proficiency</p>	<p>Be able to use digital tools, media and resources to search for navigate and interpret digital information appropriate and critically</p>	<p>Be able to use digital tools, media and resources to put together, remix and develop digital elements into products like multimodal texts.</p>	<p>Be able to use digital tools, media and resources safely and to have a clear understanding of privacy and ethical use of Internet.</p>	<p>Be able to use digital tools, media and resources to collaborate in learning, self-representation on the Internet and presentation of knowledge and skills to different audiences.</p>

Pupils

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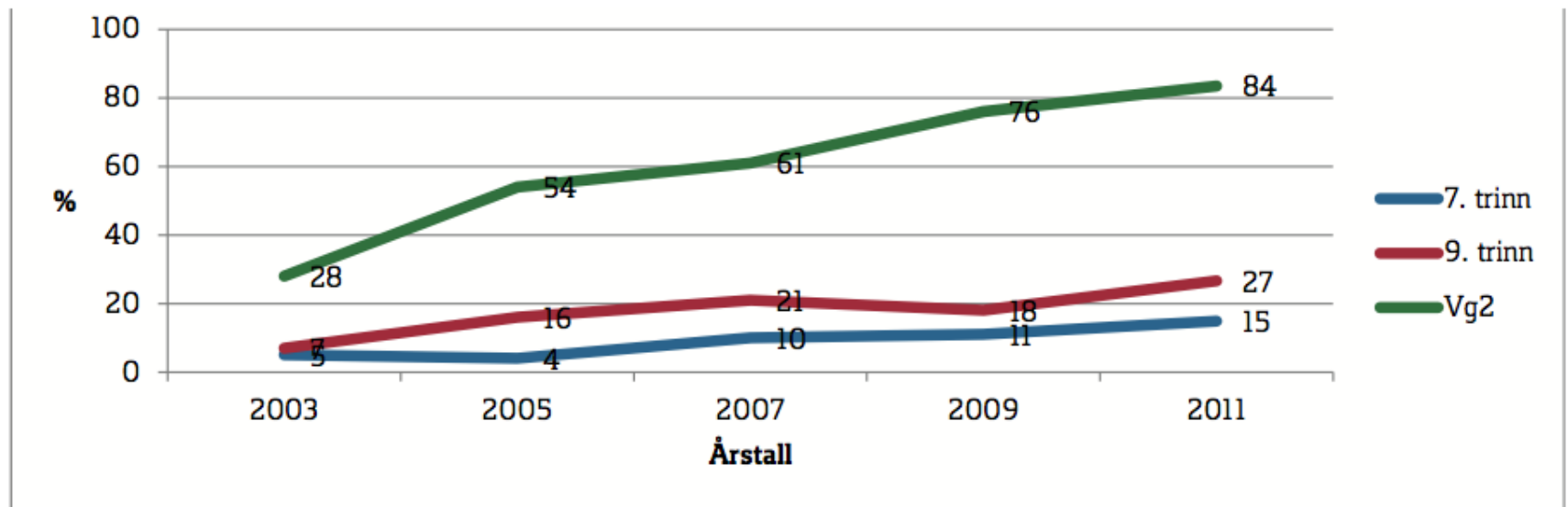
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Quality of computers

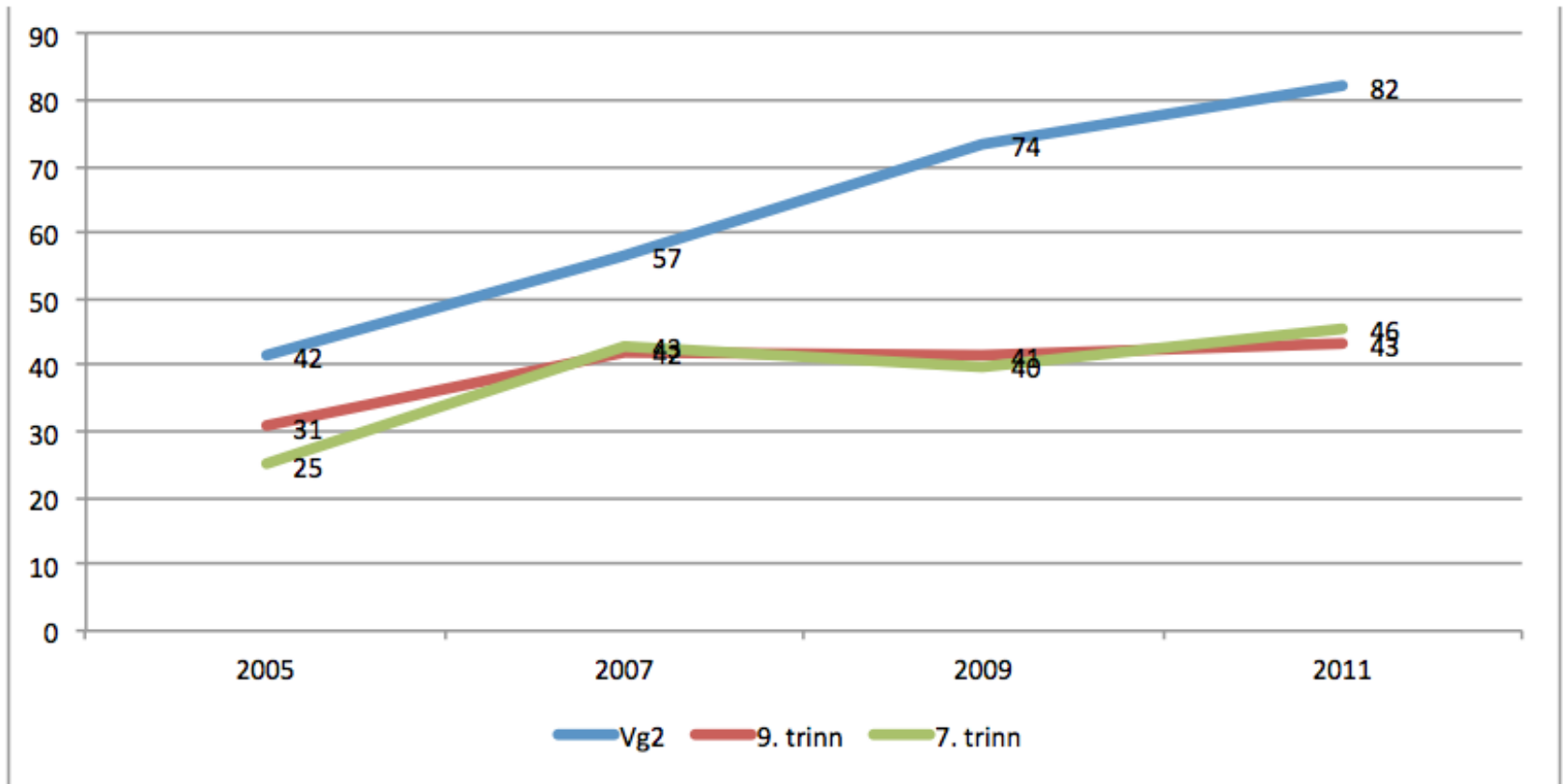
Agrees to statements about the school's computers	7. grade	9. grade	12.grad
The computers startup time is fast	48 %	36 %	44 %
The computers have equally good software as I'm used to from home	37 %	26 %	46 %
The computers are well suited for making presentations	85 %	73 %	80 %
The computers are well suited to edit movies	50 %	26 %	46 %
The computers are fast enough on the Internet	61 %	44 %	62 %

Trends in time used with computers at school

■ 4 hours or more per week



Trends in time use (subject: Norwegian).



Attitudes towards use of ICT at school

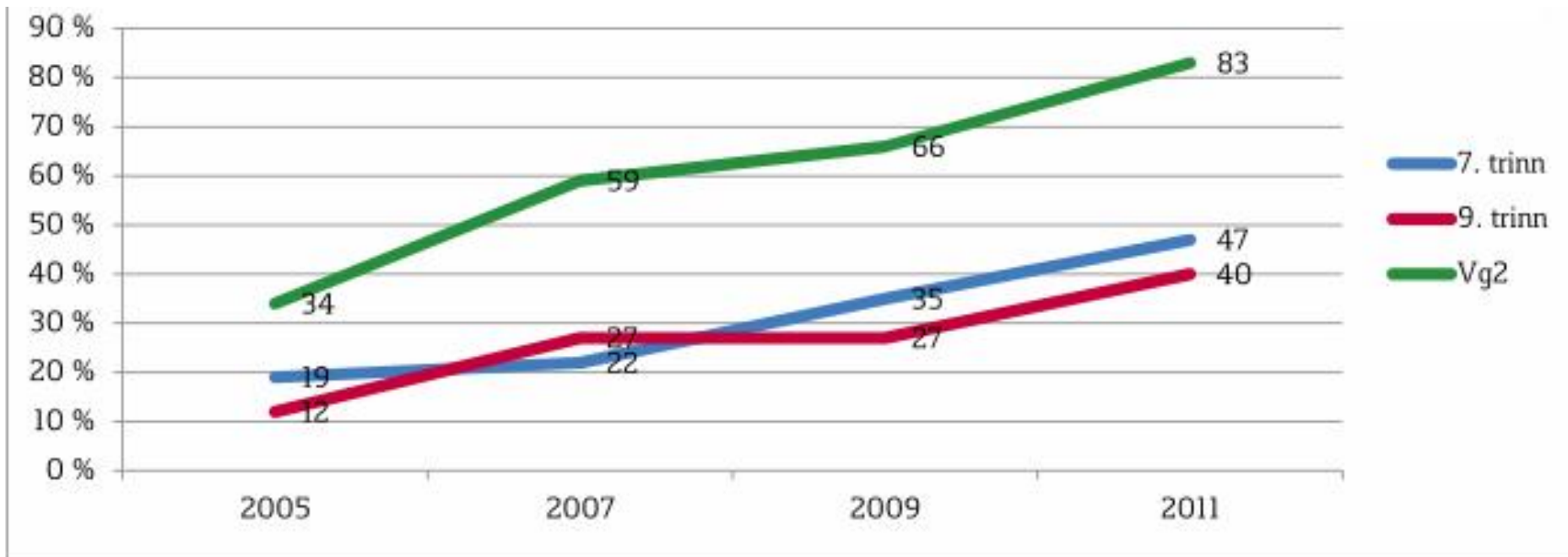
Agrees	7. grade	9. grade	12.grad
Computers are useful for learning subjects	94 %	92 %	93 %
Using computers makes it more easy to learn subject content	89 %	87 %	85 %
Computers are disturbing at school	12 %	18 %	45 %

Teachers

The background is a solid blue color. Scattered across it are various white-outlined geometric shapes, including rectangles, squares, triangles, circles, and polygons, some of which are overlapping or partially cut off by the edges of the frame. The shapes vary in size and orientation, creating a dynamic, abstract pattern.

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Time used for teaching purposes. 4 hours or more per week



Attitudes towards ICT in teachers' teaching practice

agrees	7. grade	9. grade	12. grade
In my experience, ICT adds variation to my teaching	98 %	95 %	88 %
It is more easy to differentiate between pupils when I'm using ICT	89 %	83 %	74 %
I use ICT to stimulate the pupils' curiousness for subject learning	95 %	94 %	87 %
It is more easier to activate the pupils when using ICT	91 %	83 %	80 %
It is consuming to use ICT in my own teaching practice	62 %	66 %	51 %

Different types of CPD activities and percentage of teachers that agree that it had effect on their ICT skills/competence

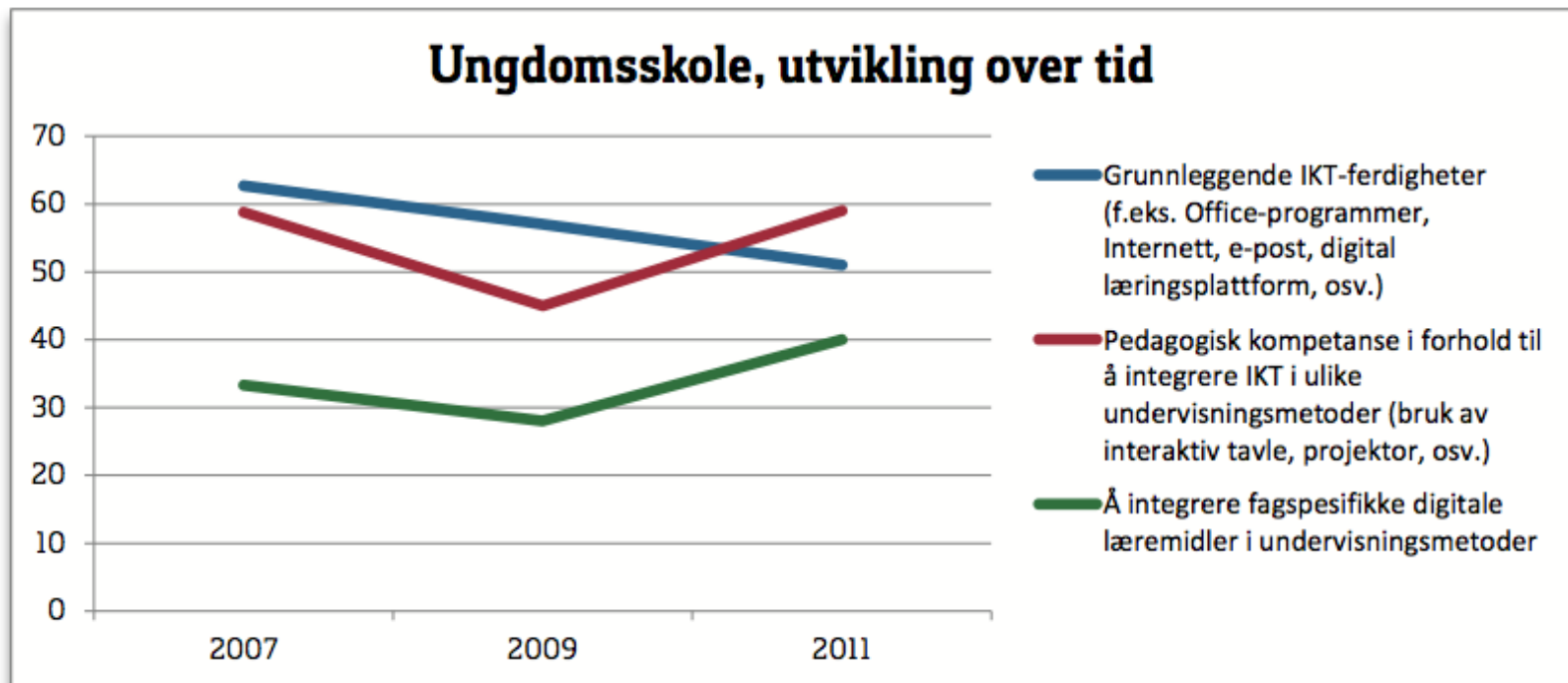
	External courses	Internal courses	Trial and error	Peer learning	Selfstudy
Grade 12	29 %	31 %	92 %	58 %	95 %
Grade 9	31 %	39 %	99 %	65 %	91 %
Grade 7	32 %	34 %	91 %	50 %	85 %

School leaders

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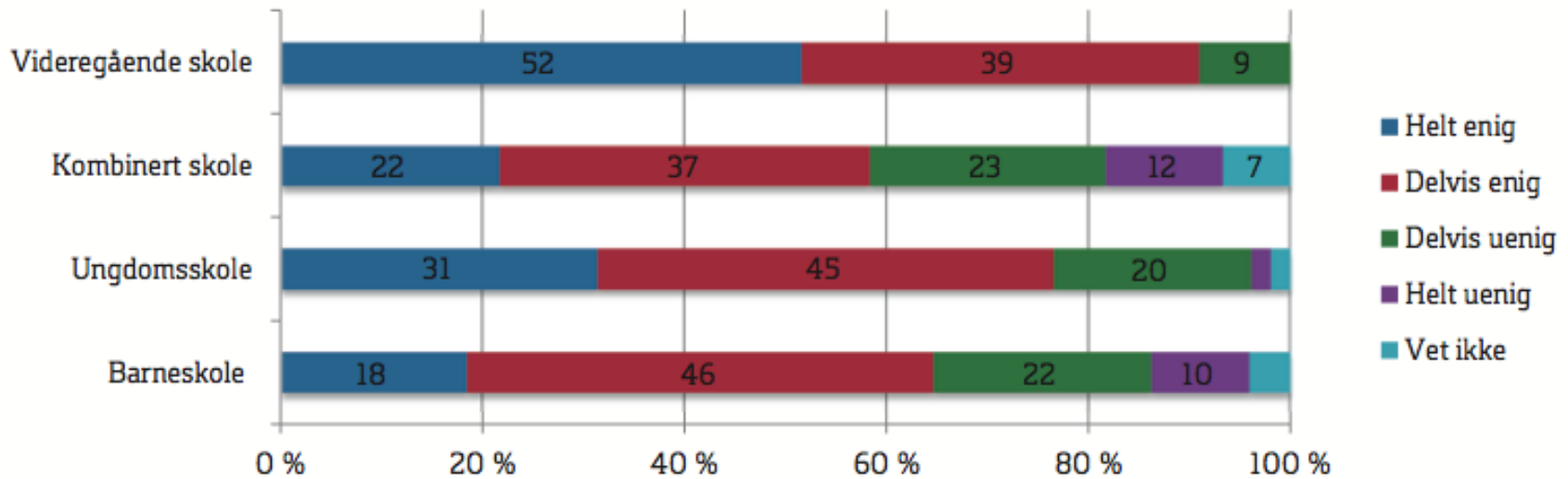
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Priorities of resources (lower secondary school)



Teachers' CPD and use of Internet

Ved vår skole har vi gjennomført kompetanseheving knyttet til bruk av Internett i undervisning og læring



Some of our other projects

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Tímaritið okkar: <http://www.idunn.no/ts/dk>

greta.gudmundsdottir@ihtsenteret.no

The future starts now

http://www.youtube.com/watch?feature=player_embedded&v=NfN5SSiRoPs