

Digital skills: linguistic or technical!

To prepare the population for the increasingly digital 'reality', the Dutch government indicates on its website that it must invest in digital skills, in technical education (21st century skills). Are digital skills mainly technical or linguistic in nature? According to the government, digitally unskilled means not being able to use a computer properly, which makes it particularly easy to fall behind socially: not being able to apply for care or benefit on time increases the risk of illness and unemployment. But are people not digitally skilled because they don't understand computers, or because they lack experience with a modern computer or tablet (for example due to poverty, or due to less energy in their free time due to heavy physical work)?

Computers are so incredibly easy to deal with, for example compared to a sewing machine, that you really don't have to be a techie. Preferably not; the government states that insufficient digital skills mainly concern employees in the lowest technical (and care) professions. Working on a computer requires some reading skills, but less than reading a book. Information is often available visually. On YouTube, for example, there are instructional videos about everything. Clicking the mouse or touching a screen is no more technical than, for example, pulling the toilet cord or pressing the light switch. Operating a sewing machine is technically a lot more complicated and requires a technical understanding that can only be compared to the level of the system administrator. But if not technical, what do digital skills actually refer to?

Research by the OECD's Program for International Student Assessment (PISA), an international comparative study of knowledge and skills in the field of reading, mathematics and natural sciences of 15-year-old students, shows that in 2018 Dutch children perform at the highest level in mathematics (just behind China and a few other Asian countries). However, they perform well below average in reading skills: a quarter of Dutch 15-year-olds run a high risk of low literacy, boys more than girls. While men are still strongly over-represented in traditional technical professions, 15-year-old girls are significantly better in the natural sciences. In the past, if a boy performed poorly in school, he would go to technical school and worked in construction, factory or mechanization. Underperforming girls went to domestic science school and became maids or nurses. So technology was for those who were not good at school, as opposed to cognitively gifted students. However, school skills are not causally related to being smart or stupid. Natural sciences are currently considered 'technical'.

Boys with their so-called 'technical' brains, however, lag considerably behind girls: while boys and girls perform equally well in mathematics, girls perform significantly better in both natural sciences and language. While Dutch 15-year-olds are good at digitally retrieving information, according to the PISA report they are relatively poor at understanding and even worse at evaluating information. Well, is there perhaps another problem?

Growing up in a digital society isn't easy. Digital skills on social media require media literacy. Posting a wrong photo or over-simplified comment can haunt someone for years, while yesterday's truths can be today's disinformation and vice versa. The word "Digital" refers to finger counting, to being able to take up only a limited number of concrete values. In this way, the nuance of our reality can only be captured to a limited extent. Thinking digitally can mean to reduce our emotional life and thinking to a limited set of discrete states, "true" or "not-true", fact or disinformation. Being digitally skilled requires looking beyond our screens and devices, learning to see the nuance between true and false. In the word "digital", the syllable "tal" comes from the Old Frisian and English word "tale" (count, tell, story; Old Saxon: tala). Counting and narration have been tied together since the Middle Ages. Either way, digital skills are more about language than technology.

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