

## Main points from the first part of evaluation

January 2019

*Translated by Simon Rotendahl (rote@dr.dk)<sup>1</sup> - February 2019*

The Center for Evaluation and Development of Science Education (NEUC)<sup>2</sup> has, on behalf of, the Danish Broadcasting Corporation (DR) evaluated the ultra:bit project in schools. These are the main points from the first part of the evaluation.

1,447 schools across the country (out of an approx. 1600 in Denmark) have been signed up for ultra:bit. The Teachers Resource Center (CFU), an ultra:bit partner, has provided BBC micro:bits to 64,287 students.

The baseline study, conducted in August of 2018, of 8,419 students in the fourth grade, before the project started, showed the following:

- A large majority among the fourth-grade students could not program, or did not know if they could (73% of the children)
- 86% of fourth grade students expressed a desire to learn about technology (girls: 84% - boys: 89%)
- Almost all girls in the fourth grade (9 out of 10) did not share the understanding of many boys and parents, that technology and programming is mostly for boys. The girls expressed, more highly, that technology and programming is for everybody, comparatively.

The study, conducted in November of 2018 among 330 of the teachers across the country, whom participated in the ultra:bit project, showed the following:

- 83% of teachers at the time had used the micro:bits, and those that had not, had it scheduled for later in the school year.
- 90% of the teachers experienced that after working with ultra:bit, it was easier to code.
- 21% of teachers thought coding to be easy, before the project launched. After the launch 48% find it easy.
- 85% of the teachers felt well prepared to teach the use of the technology, to enable the students to use technology for creative solutions.
- 61% of teachers was inspired to develop their own activities and projects with the micro:bit.
- 95% of teachers experienced that the students found it easier to code, than they thought. 96% of teachers experienced that the students wanted to learn more about coding and technology. 90% of teachers said that the students expressed interest in knowledge about technology.
- 59% of teachers experienced, to some extent, that they were prepared for teaching critical thinking, about technology through ultra:bit, and 50% of teachers experienced that the students showed signs of critical thinking about technology.

---

<sup>1</sup> The original summary, that has been translated in this document, can be found here [https://www.dr.dk/undervisning\\_flash/ultrabit/projektsite/NEUC\\_ultrabit\\_evaluering\\_RESUME.pdf](https://www.dr.dk/undervisning_flash/ultrabit/projektsite/NEUC_ultrabit_evaluering_RESUME.pdf). The entirety of the original report can be found here [https://www.dr.dk/undervisning\\_flash/ultrabit/projektsite/NEUC\\_ultrabit\\_evaluering.pdf](https://www.dr.dk/undervisning_flash/ultrabit/projektsite/NEUC_ultrabit_evaluering.pdf).

<sup>2</sup> The Center for Evaluation and Development of Science Education, is driven by the institute of Scientific Educations didactic, at the university of Copenhagen, and Astra - Center for learning in nature, technology and health. Read more at [www.neuc.dk](http://www.neuc.dk), keep in mind that the site is danish

