In 1995, Steve Jobs said: “Everybody should learn how to program a computer, because it teaches you how to think”,

Yet it would appear that we are teaching less computer science, not more, despite our increasing reliance on it.

According to a report by Education Scotland, dated January 2022, numbers studying National Qualifications have been falling between 2010 and 2021. In 2010, 8,817 pupils were presented for National Qualifications 5 – equivalent to GCSE or old standard/O grade. But this fell to 6,288 in 2021 – a near 30% drop.

There is a huge attrition in pupils going onto Highers – 53% in 2021. There’s an even bigger drop in numbers going on to Advanced Highers in 2021 – just 565 in 2021 – that's 16% of those who did Highers. What more just 8% of those doing Nationals in Computer Science, ie 17/18 year olds, went on to do Advanced Highers in 2021.

There are also National Progression Awards, a Scottish Credit & Qualifications Framework qualification, also delivered by schools, which offer information science and digital courses. These are offered up to Level 6, equivalent to National qualifications.

Here is where it gets complex. It is not clear how many dedicated computer science teachers there are delivering courses and how much is taught under other disciplines such as business studies or “digital”. 90% of secondary schools have dedicated computer science teaching OR teaching as part of wider business education or digital courses, says the report.

We also know the number of computer science teachers has been falling from 766 in 2008 to 596 in 2020 – a 26% drop.

So, we have fewer young people taking computer science, fewer teachers teaching it and a huge attrition rate in students taking advanced courses.

To help understand this we are bring together publically available data to help us see where we are in secondary schools in terms of computer science teaching. Is it increasing or decreasing, where are the gaps across Scotland, and how many code clubs there are.

This data is being collated and mapped onto an interactive map allowing users to visually explore the data.