ada computer science

Impact report

2024

Introduction

Ada Computer Science is a free learning platform for computer science students and teachers.

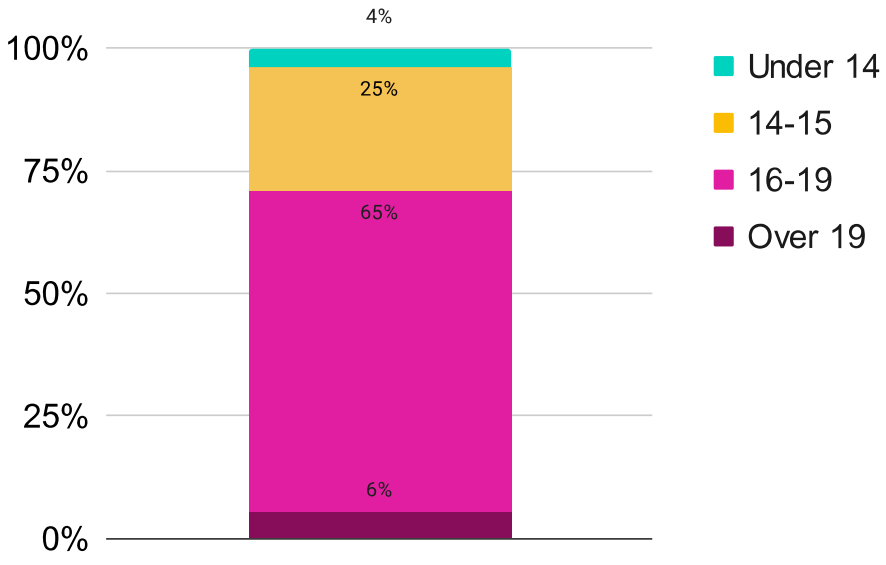
It provides high-quality, online learning materials to use in the classroom, for homework, and for revision. Our experienced team has created resources that cover every topic in the leading GCSE and A level computer science specifications.

At the Raspberry Pi Foundation, we're committed to gathering evidence on the impact of our products and using feedback from our users to keep improving. This report presents the findings from a recent survey and follow-up interviews of students and teachers on their use of Ada.

Data collection

The findings are based on surveys completed by 163 students and 27 teachers between May and July 2024. The majority of these students were aged between 14 and 19, with responding teachers reporting that this was the age range they most commonly taught. In order to explore the feedback further, we conducted in-depth interviews with three computer science teachers in September 2024. Thank you to everyone who took part — we really value your feedback!

How old are responding students?

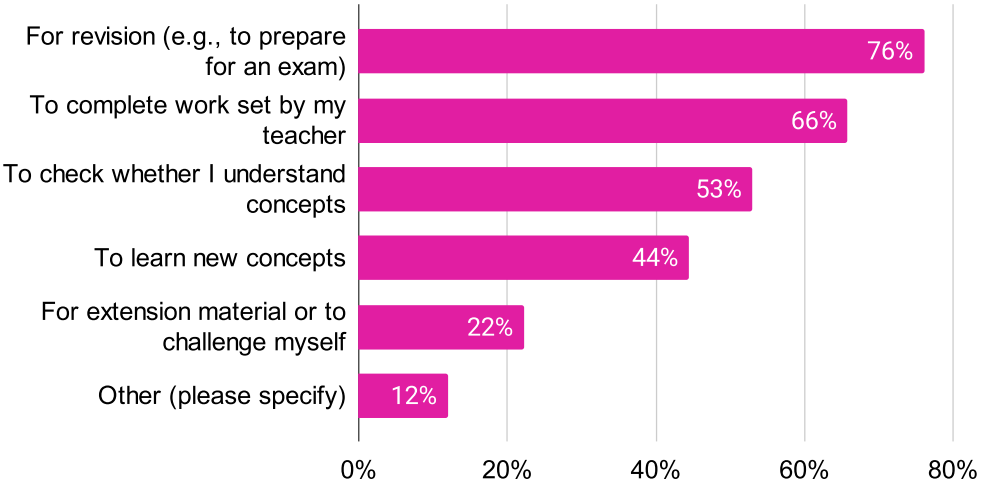


How is Ada being used?

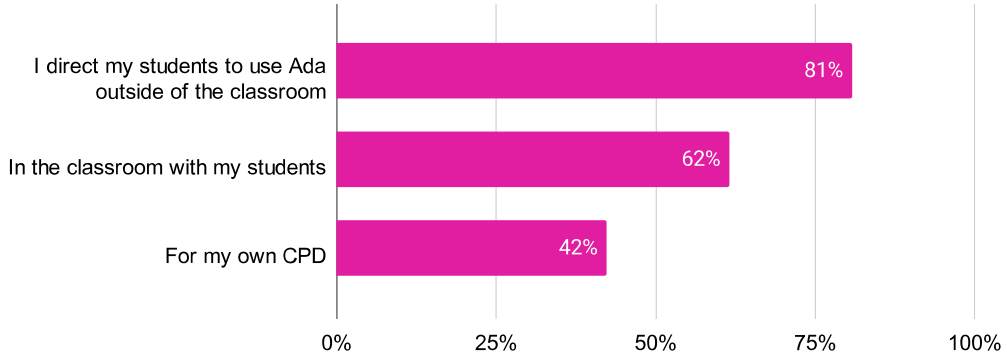
The most common ways students use Ada, as reported by more than two thirds of the students surveyed, was for revision and/or to complete work set by their teacher. Similarly, teachers most commonly said that they direct students to use Ada outside the classroom.

> **"I recommend my students use Ada Computer Science as their main textbook"**
>
> — Teacher

How do you use Ada Computer Science? (Students who have been using Ada CS for more than one month, N=117)



How do you use the content and questions on the Ada Computer Science platform? (Teachers who have been using Ada CS for more than one month, N=26)



71% of teachers reported using Ada to support the delivery of a formal qualification. A significant proportion of teachers also reported using Ada for their own continuing professional development (CPD).

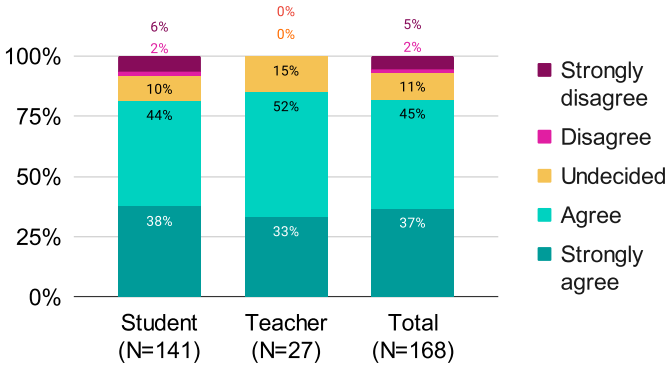
What is users' experience of using Ada?

Most respondents agreed or strongly agreed that Ada is useful for learning (82%) and high quality (79%).

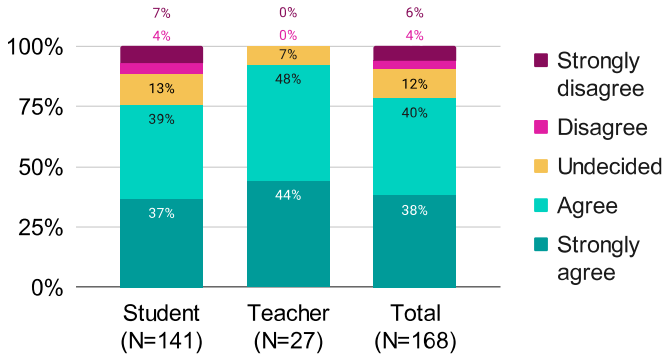
> **"Ada Computer Science has been very effective for independent revision, I like how it provides hints and pointers if you answer a question incorrectly"**
>
> — Student

> **"Wonderful platform for learning"**
>
> — Student

Ada Computer Science resources are useful for helping me to learn about Computer Science / to support my teaching



Ada Computer Science resources are high quality



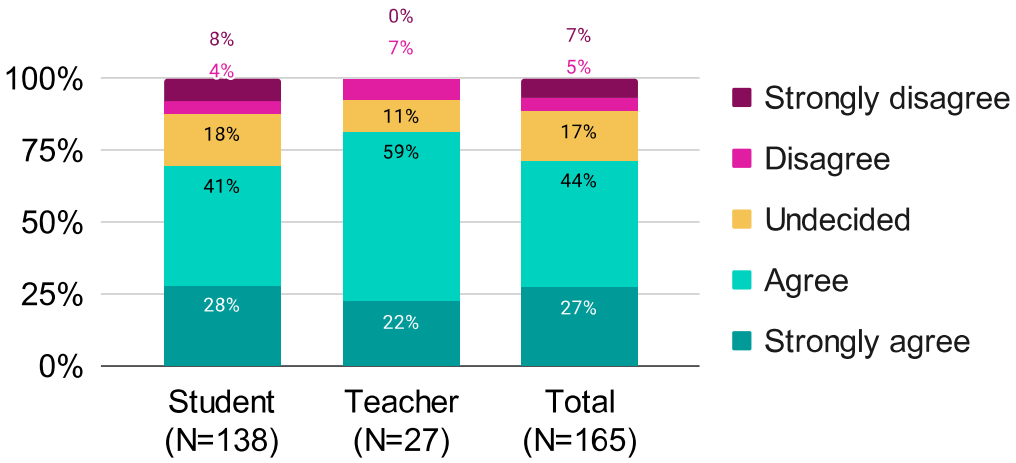
Ada users were generally positive about their experience of the platform and using it to find the information they were looking for.

> **"Ada is one of the best for hitting the nail on the head. They've really got it in tune with the depth that exam boards want"**
>
> — Ian Robinson, computer science teacher (St Alban's Catholic High School, UK)

> **"The main reason I really like Ada is that if you come across vague or inaccurate material, or even a bug in the code, the team is always happy to engage and discuss improvements, which consistently leads to enhanced resources"**
>
> — Mark Gadsby, computing teacher (Haywards Heath College, UK)

Among the respondents who reported finding Ada harder to use, some shared ideas for improvements, many of which we will implement (please see the conclusion below).

When I navigate Ada I can find the content that I am looking for



What impact is Ada having?

Around half of teachers agreed that Ada had reduced their workload and/or increased their subject knowledge. Across the teachers surveyed, the self-estimated weekly time saving was 1 hour 8 minutes on average.

81% of students agreed that as a result of using Ada they had become better at understanding computer science concepts. Other benefits were reported too, with most students agreeing that they had become better problem-solvers, for example.

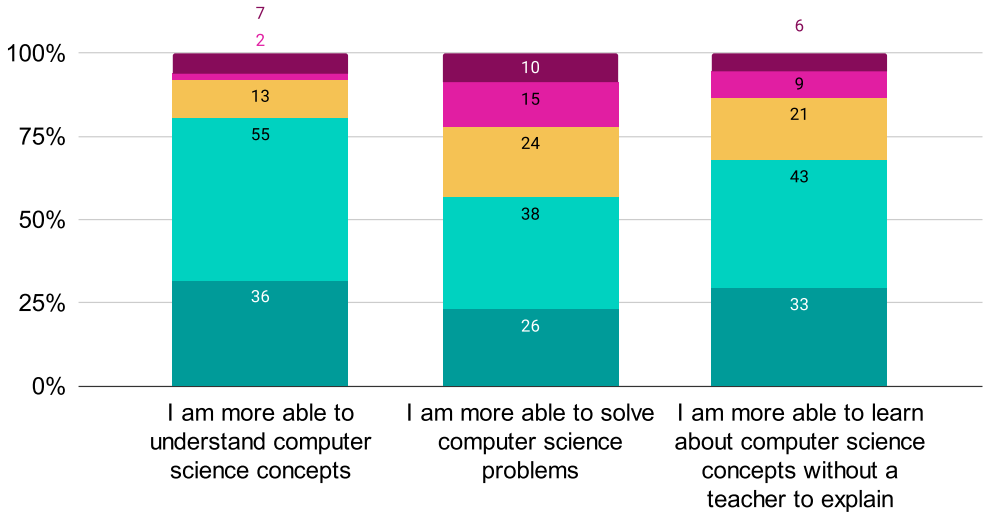
"I love Ada! It is an extremely helpful resource... The content featured is very comprehensive and detailed, and the visual guides... are particularly helpful to aid my understanding"

— Student

"Ada Computer Science is an excellent resource to help support teachers and students. The explanations are clear and relevant and the questions help students test their knowledge and understanding in a structured way, providing links to help them reconcile any discrepancies or misunderstandings"

— Teacher

As a result of using Ada Computer Science...
(Student responses, N=113)



Conclusions and next steps

Students and teachers are really enthusiastic about Ada, particularly its clear and comprehensive explanations, relevant questions, and alignment with exam board specifications. They value the responsiveness to feedback and the ability to engage in dialogue about content improvements. Most agree that Ada is useful for learning (82%) and high quality (79%), and around half of teachers reported that Ada has reduced their workload and increased their subject knowledge. 81% of students agree that Ada has enhanced their understanding of computer science concepts.

We're keen to keep improving the usefulness and impact of Ada for our users, and to respond to the feedback we receive. In July we released updated site navigation, followed by new question-finder designs in August.

In early 2025, we'll be making improvements to the markbook. This will include giving teachers an overview of the assignments they've set and providing more summary data on student results for assignments, including average scores for each question. Later in 2025, we'll be making improvements to how teachers can create and set assignments. This will entail allowing students to retake previously completed questions without them auto-completing.

Thank you again to everyone who shared their feedback with us. We really appreciate your contribution to improving Ada Computer Science!

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