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Are 1:1 iPad programs worth it?

Impact of iPad Strategies on Education

What is a 1:1 iPad program?

1:1 iPad program is simply this: **each student and each teacher has their own iPad that they can use in class and at home.** These iPads have the potential to facilitate learning in a variety of ways, and when each student is assigned one of their own, they can work, research and investigate at their own pace.

Sounds straightforward enough.

However, debate continues about whether or not 1:1 iPad school programs genuinely improve outcomes.

Here's how the debate generally presents itself:

Nay: some educators and parents believe that schools are just adding shiny gadgets into the mix that don't actually contribute toward student success. Some even think that iPads can be a distraction from learning, and a waste of limited educational resources. Others point to worries about extended screen time.

Yea: others believe that, when used to support student-centric learning models such as Technology-Enhanced Active Learning (TEAL), iPads can help usher in a fundamental and much-needed change in how we educate our youth. With the right technology, training and shift in mindset, classes can move from students passively listening to students actively engaged in learning. Technology, they argue, can make personalized lessons for each student possible.

Complicating this debate is the fact that quantitative and qualitative data on the topic has been sparse; 1:1 iPad programs are relatively new.

That's why James Jackson, former Director of Digital Transformation at **Shaw Education Trust**, decided to search his own organization's data for answers while working on his dissertation *"Is moving to a 1:1 device strategy for learners harming or improving academic performance?"* at **North Wales Management School** at Wrexham Glyndŵr University.

Shaw Education Trust is a growing, multi-academy trust consisting of 30 schools across the UK— several of which have instituted 1:1 iPad programs.

Jackson noted that during the height of COVID-19 restrictions, schools around the world adopted remote learning models, many of which were 1:1 iPad programs. The question he posed: **should schools continue with this 1:1 model, or return to traditional classrooms?**

Jackson took a look at the grades at a number of schools within the Shaw Education Trust to find out. He also organized discussions and sent questionnaires to teachers, parents and students about how the devices have affected students' learning.

What is TEAL?

Technology-Enhanced Active Learning is an educational model created first at MIT that focuses on problem solving and encourages a dynamic learning environment. It's a teaching format that "merges lectures, simulations, and hands-on experiments to create a rich collaborative learning experience." Instead of students in rows with a teacher in the front, students are grouped at multiple tables around the room and a teacher moves from table to table, assisting and encouraging when needed.

TEAL is meant to foster:

Collaborative learning

Problem-solving and presentation skills

Media-rich visualizations and simulations

A closer connection with the instructor

HYPOTHESIS

Jackson's hypothesis

Jackson hypothesized that he would discover that **1:1 iPad programs in the classroom do benefit learners and lead to increased performance in testing and attainment.**

Other questions posed during research

Jackson also asked himself and others the following:

- Is a 1:1 iPad program the best strategy, or is there another approach that may work better?
- Is there a difference in improvement at different age ranges?
- Is there a difference in achievement based on 1:1 iPad programs, 1:many or no devices?
- Where 1:1 device strategies have been implemented, is there an increased perception of achievement?
  How do these perceptions line up with actual results?

WHO

Who participated? How?

In order to test his hypothesis and to answer some of his secondary questions, Jackson chose from schools with a mix of approaches. Some had 1:1 iPad programs, some 1:many. Some had no devices beyond standard computer labs, or had improved computer labs, but neither of these standard setups included any changes in educational approach or practice.

- Parents and learners at secondary schools with 1:1 device programs answered perception questionnaires
- Teaching staff at all schools with 1:1 iPad and 1:many iPad programs answered questionnaires
- Achievement numbers were a comparison of grades for the periods before device handout and after; they also compared data from schools with iPad programs and without

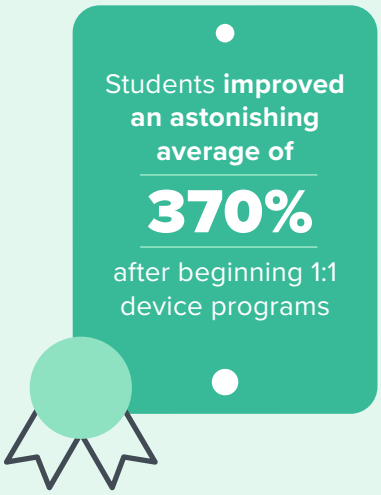
SUMMARY

What did James Jackson find out?

We'll cut to the chase: 1:1 iPad programs steeply increased student achievement.

The primary finding was that students **improved an astonishing average of 370%** after beginning 1:1 device programs; in students enrolled in **1:many programs, they improved an average of 76%.**

The study also highlighted the fact that changes in approach to teaching and learning **combined** with a device were more beneficial than in places where schools introduced devices with no change in teaching methodologies.



A recent Forrester study backs up many of Jacksons' findings.

Forrester's newly-released study **"The Total Economic Impact™ Of Apple Devices For K-12 Education"** found that Apple devices themselves can improve collaboration for students and teachers.

Teachers benefited from 1:1 programs and Apple

Teachers reclaimed

36 hours

of lesson time per year.

Forrester found they recaptured 1.5 hours per week using Apple, $1.35 million worth of labor over four years

92%

of teachers felt that having an iPad substantially helped their planning and teaching

80% *of their lessons used a device when part of a 1:1 program*

15%

reduction in teacher turnover by simply moving to Apple devices

Students improved by participating in 1:1 programs

In addition to the on average 370% improvement with 1:1 devices and 76% improvement for devices in shared groups, Jackson found that:

85%

of students said their work had improved with 1:1 devices

95%

of learners either agreed or strongly agreed that their iPad was helping them with their learning

77%

of learners found their iPad made it easier to access what they needed for assignments

Parents were happy with 1:1 programs

90%

of parents Jackson surveyed believe that the iPad helped in educating their child

95%

of the learners either agreed or strongly agreed that the iPad and 1:1 program was helping them learn

55%

of parents felt that their child was more excited about learning since they got the iPad

Forrester's study found that Apple devices improve:

- **Device reliability and resiliency**
- **Lengthen device lifecycles**
- **Offer greater IT operational efficiencies**
- **Lower security threats**

Differences in achievement between Primary and Secondary schools

Primary learners, on average, improved 30% - 757% when starting iPad programs. Secondary students still improved, but by less: 7.5% to 164%

Particularly interesting in these comparisons between age groups is that teacher perceptions were inverse to actual improvements: 54% of Primary school educators did not believe their students had improved at all from the technology and changes in educational approach compared to 42% of Secondary teachers. "It would seem," said Jackson, "that teaching staff are more pessimistic about the improvement compared to the reality of the improvement being shown by learners with a 1:1 device."

The data looks great, but how much will this all cost?

Part of why Jackson had enough data to do this research was because to the lowered costs of tablets in the U.K when compared with laptops. .

If your school chooses one type of device for students, the iPad is the way to go.

"The realistic cost shift has seen a 1:1 tablet device now to be around £250, compared to the price of a reasonable laptop at £500," said Jackson.

But the financial benefits go far, far deeper than initial cost of equipment.

How Apple products save schools money

Forrester's newly-released **"The Total Economic Impact™ Of Apple Devices For K-12 Education"** explores the many ways that Apple products save educational organizations money.

Beyond the saved time for instructors outlined by Jackson's paper, school districts that take the long view will discover that over four years, using Apple devices actually save them money.

The Forrester study created a composite U.S.-based public school district serving 10,000 students across grades K-12, and the numbers were impressive.

Full-time IT staff required for device management

Without Apple:

8

With Apple:

5.2

Over a four-year span, Apple delivers:

48%
Return on Investment (ROI)

20%
device residual value after four-year lifecycle for iPad

25%
reduced device maintenance and management labor with MacBook Air

35%
less labor cost for device maintenance and management

15%
lower teacher turnover, saving searching and training costs

30 hours
of teacher time saved per year

How can Jamf help improve student outcomes and save money?

One important lesson from Jackson's study is that students gain the most when technology and teaching modalities combine. Deploying with purpose makes for better educational opportunities than simply handing out iPads.

Jamf makes all of this easier. In fact, Jamf managed the iPads for all of the schools studied in Jackson's paper.

Supporting innovative learning and teaching

Jamf School which Shaw Education Trust uses to manage Apple devices at all of its schools, not made it easier to manage and secure Apple devices, but also made it easier to get innovative new tools integrated into teacher's lesson planning and in-class exercises.

Jamf School enables much of TEAL-focused methodologies, allowing students and learners to communicate one-on-one with **Jamf Student** by providing:

- Multiple avenues for students to ask questions and engage in conversation with teachers
- Accommodation for different learning styles with an electronic 'raise hand' feature
- Integration with some of the best educational apps available such as Explain Everything, Sphero and e-Spark

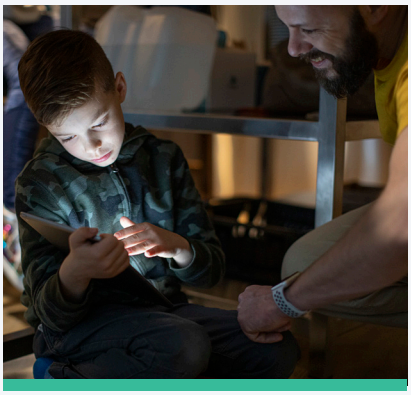
See how one TEAL-based model program engages students around the world in their own communities with Jamf School.

Equipping teachers

Jamf School, especially when accompanied by **Jamf Teacher**, helps teachers to design and share lessons, manage classrooms and connect authentically and individually with their students.

Enabling and protecting students

Schools have unique security, privacy and safety concerns. Students deserve to learn fearlessly in a safe and appropriate environment. That's why Jamf offers schools endpoint protection, content filtering and malware protection with **Jamf Safe Internet**.



Including parents and guardians

Jamf Parent helps parents and guardians to ensure that their students are using the internet safely and at appropriate times. It can also notify parents when students have arrived at school or left for home.

Jamf wants to help your students succeed.

As we've seen, 1:1 iPad programs can do wonders when combined with the right methodologies and structure. Jamf School not only helps teachers and students, but also aids IT and teachers to manage devices, software and more with an intuitive interface.

Jamf assists 1:1 iPad programs in particular with management and security, allowing students to use facial recognition to open their iPads, store their work in the cloud to access later and collaborate with other students and their teachers.

Our integrations can allow teachers to spark young minds with absorbing and engaging lessons, media and hands-on learning.

Want to learn more about how Jamf can help you establish a successful 1:1 iPad program?

Get Started

Or contact your preferred reseller

Sources

[1] "Is moving to a 1:1 device strategy for learners harming or improving academic performance?" James Jackson, Wrexham Glyndŵr University, 2024

[2] "The Total Economic Impact™ Of Apple Devices For K-12 Education: Cost Savings, Efficiency, And Learning Benefits Enabled By Devices For Education," A Forrester Impact™ Study Commissioned by Apple, January 2023

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