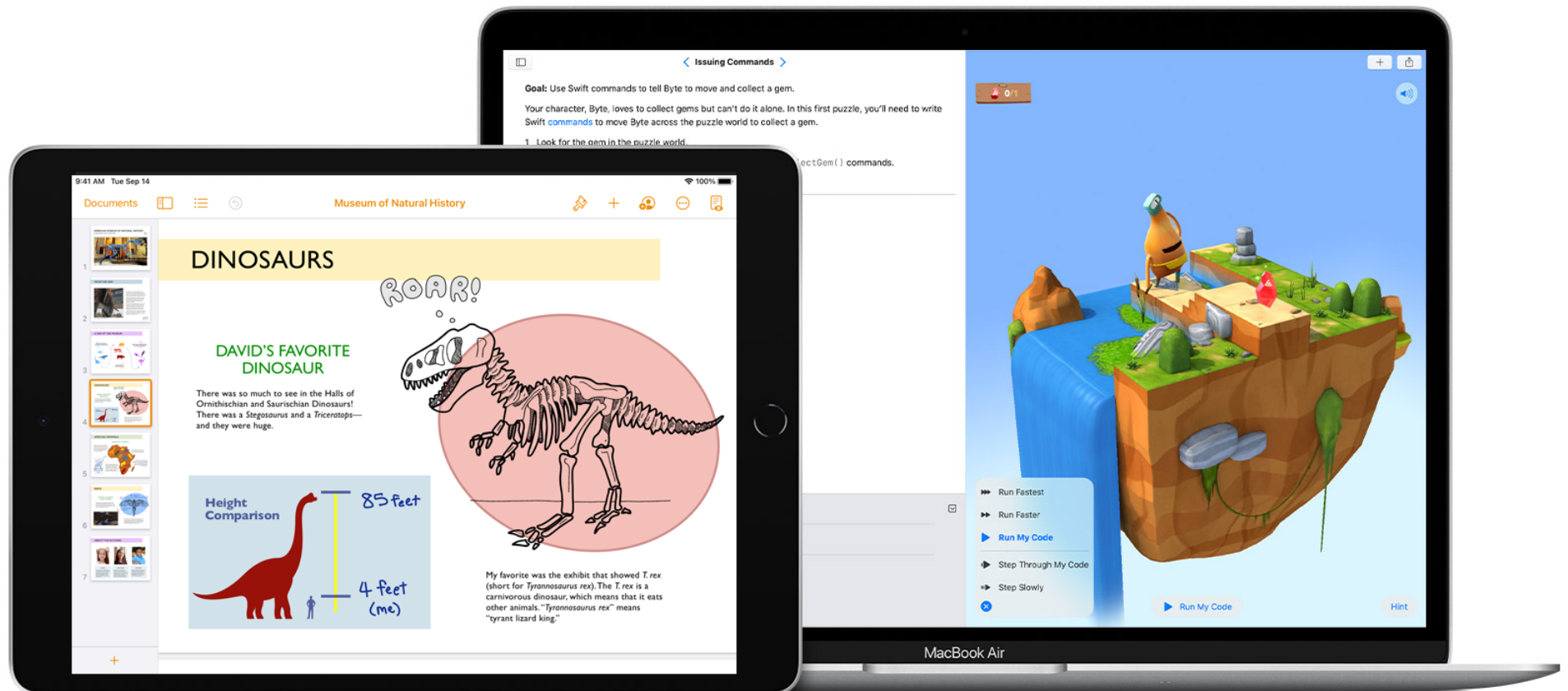


# iPad and Mac in Education Results

June 2022



Schools all over the world are using iPad and Mac to teach transformative lessons and activities, no matter where students are learning.

As teachers incorporate technology into their lessons, they empower students to be self-directed and collaborative learners. This document shares the successes that K–12 and higher education institutions have observed with Apple devices, both in and out of the classroom.



This document highlights the results and trends that institutions using Apple products have observed. The data in this document is self-reported by the institutions — Apple wasn't involved in gathering or analyzing the data and doesn't have any knowledge of the methodologies used.

**Motivation and Engagement** stories highlight how schools using Apple technology have smoothly transitioned to at-home, hybrid, or asynchronous learning, as well as how technology initiatives at schools have fostered creative and accessible learning environments that continue to attract new students.

**Collaboration and Feedback** stories show how virtual classrooms, video chat, and accessories like Apple Pencil have allowed for meaningful and personalized communication and feedback in increasingly mobile and paperless environments.

**Academic Achievement** stories illustrate assessment outcomes and showcase student projects that have real-world applications.

**Productivity and Efficiency** stories describe some of the ways that Apple technology has aided institutional efficiency and savings.

A number of school **spotlights** are included throughout, sharing stories from institutions whose results speak to more than one of these thematic categories.



# Motivation and Engagement



**"Because Apple products allow them to develop professional projects, students are both encouraged and motivated to take ownership of their own learning, which creates a culture of drive."**

**Dana Karczewski**

Principal

Meadow Ridge School

Orland Park, Illinois, United States

A [survey published by the Wall Street Journal](#) found that student attendance rates fell in 75 percent of U.S. school districts as the 2020 academic year went on — dropping by 1.5 percent each month. A 2020 [UNICEF report](#) estimated that 1 billion children are at risk of falling behind. It found that government policy measures to ensure learning continuity through broadcast or digital media could potentially reach a maximum of 69 percent of preprimary to secondary students globally. Access to technology helped prepare staff and students to continue teaching and learning when they were faced with the challenges of moving to at-home learning.

## Old River School

*Downey, California, United States*

In this public school for fourth and fifth grade, 76 percent of students are eligible for free or reduced lunch and 19.1 percent are English-language learners. Using iPad and MacBook, students and faculty were able to smoothly transition to at-home learning, and the school recorded a 95 percent attendance rate during that time.

95%

at-home learning attendance rate

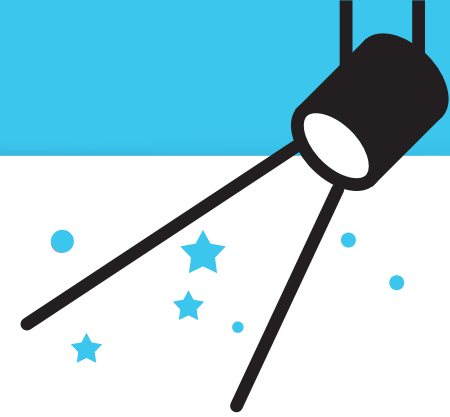
## IELEV Schools

*Istanbul, Turkey*

This private K–12 school began their one-to-one iPad initiative in 2016. Students from fourth grade on use iPad, and high school students use MacBook Air. Because of IELEV's vision of tightly integrating collaborative technology, students and staff were already familiar with their devices and platforms when schools moved to at-home learning, and 97 percent of students remained in attendance.

97%

at-home learning attendance rate



## M.S. 442 Carroll Gardens School for Innovation

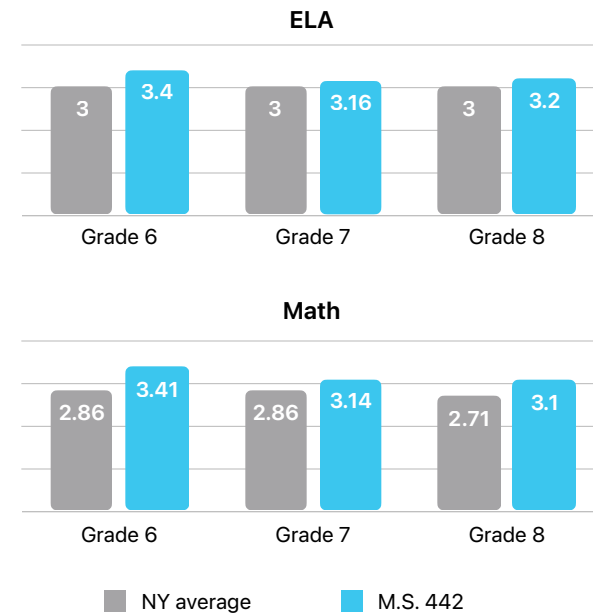
*Brooklyn, New York, United States*

Since 2016, this public middle school has implemented a one-to-one iPad program for all students and staff. The school now also provides access to MacBook and Apple Pencil. Technology is embedded in the curriculum, and as a means of differentiating instruction, students are given opportunities for asynchronous and blended learning with individual schedules. Part of the school's vision is to foster student independence and **motivation** through effective use of technology, and students demonstrate their understanding and **engagement** using Keynote, Pages, iMovie, and coding apps.

As a result of the school's efforts to keep students connected, during the 2020–2021 academic year, students in blended and at-home learning environments recorded a 96 percent attendance rate.

In the same year, 100 percent of eighth graders took the high school-level Algebra 1 Regents Examination and **achieved** passing scores. And students in all grade levels are outperforming state assessment averages in math and language arts.

### State Assessments: M.S. 442 Scores Compared with New York Averages

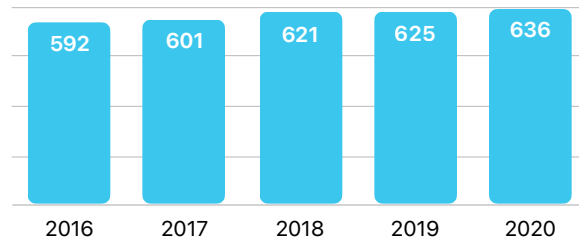


In July 2021, [data from the National Center for Education Statistics](#) showed that during the academic year 2020–2021, the number of students enrolled at U.S. public schools decreased by 3 percent. Despite this trend, some schools have been able to continue to attract new students through their innovative learning environments and effective technology deployments.

## International American School of Cancún

*Cancún, Mexico*

At this private K–12 school, enrolment has increased annually since introducing Apple technology in 2016. The institution notes that they were one of the few schools in Cancún to offer uninterrupted teaching and learning throughout the pandemic — and the trend of growing enrolment has continued. Primary and middle school students use iPad, and each high school student is designated their own MacBook.

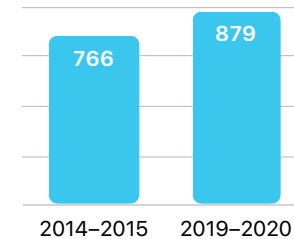


Student enrolment

## Lewis Elementary School

*Downey, California, United States*

The campus at this public K–5 school includes an innovation and design lab where students code using the [Swift Playgrounds](#) app and a dedicated studio where they work with GarageBand, iMovie, and Clips. Lewis Elementary recorded a 15 percent increase in enrolment from 2014 to 2020, with nearly one-quarter of new students coming from surrounding schools and districts. Administrators attribute this trend to the school's engaging learning environments and the opportunities that their technologies provide to students with diverse needs.



Student enrolment

## Midland University

*Fremont, Nebraska, United States*

In 2018, students and full-time faculty at this private liberal arts college were issued iPad and Apple Pencil for teaching and learning. Academic departments at Midland incorporate iPad into lessons in a number of ways. In the nursing department, using iPad with VR headsets provides nursing students with experiential learning opportunities. As a result of this project, one faculty member was invited to present on their curriculum at a 2020 conference hosted by the American Association of Colleges of Nursing.

In the three years since launching their one-to-one initiative, Midland has observed record-setting enrolment each year, with an 8 percent improvement in first-year retention.

In addition, 91 percent of students in the 2020 graduating class were either employed or accepted into a graduate studies program within six months of graduation.

## Collège du Sacré Coeur

*Halluin, France*

Curriculum at this private middle school includes using [AR on iPad](#) to enrich natural science studies and to help students visualise technical objects and functions in design and engineering courses. The school has partnered with a museum in a nearby city on a project where students use iPad to create interactive content with the museum and present it in a 360° video. And to empower learners with disabilities — a population that has tripled in the last nine years — educators at this school integrate iPad [accessibility](#) features into lessons.

As a result of innovative instruction at the school, surveys show that 91 percent of parents believe iPad has allowed for better educational continuity during periods of at-home learning, and 96 percent of educators report that iPad is an indispensable tool in their teaching.

↑8%

improvement in first-year  
retention since 2018

91%

of class of 2020 graduates were  
employed or accepted into graduate  
program within six months of graduation

---

96%

of teachers report that iPad is an  
indispensable tool in their teaching



# Collaboration and Feedback

A photograph of two young men sitting outdoors at a table. The man on the right, wearing a grey beanie and a blue jacket, is looking at a laptop screen and gesturing with his hand. The man on the left, wearing a blue jacket, is pointing at the laptop screen. The laptop screen displays a complex interface with various charts and data. The background is a blurred outdoor setting with trees and a building.



**"It is our commitment to our school that no digital divide will occur. We all deserve the right to learn."**

**Kerry Lilico**

Head Teacher

Stephenson Memorial Primary School,  
Wallsend, United Kingdom

Providing opportunities to stay connected through technology is one way that schools can strive to maintain equitable and accessible education. Teachers are using collaborative documents to personalise instruction, Apple creative apps to design lessons and activities, and accessories like Apple Pencil for personalised digital feedback. In virtual classrooms and video chats, students are connecting with each other and their broader communities. On school websites and platforms like Seesaw and Showbie, students are sharing their creative work with an audience of peers, teachers, and families. And in the classroom, AirPlay lets anyone share their screen so the whole class can collaborate instantly.

## **Cheongwon Elementary School**

*Seoul, South Korea*

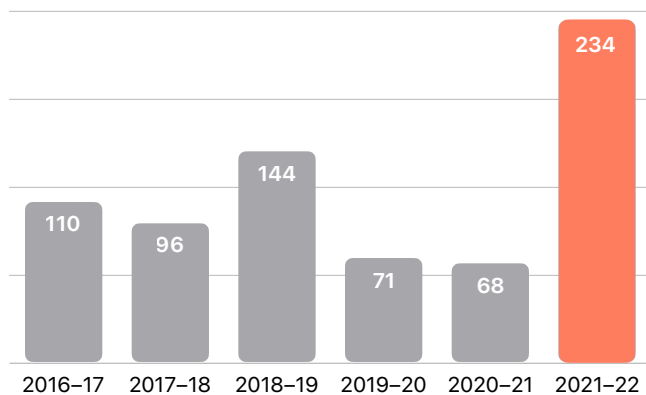
Since the launch of the school's iPad initiative, Cheongwon students have increasingly been able to engage in self-directed classes and demonstrate their creativity through collaborative projects. The school has also hosted STEM learning camps, where Cheongwon students use Apple devices to connect with students at Seoul National University and Harvard Graduate School of Education. Administrators and IT staff note that since the introduction of [Apple School Manager](#) and mobile device management solutions, it has become more convenient for teachers to manage student accounts, purchase and install apps in bulk, and manage iPad remotely. And faculty have observed that the [Schoolwork](#) app has made it easier to collect student work and evaluate assignments.

# Highlands International School México

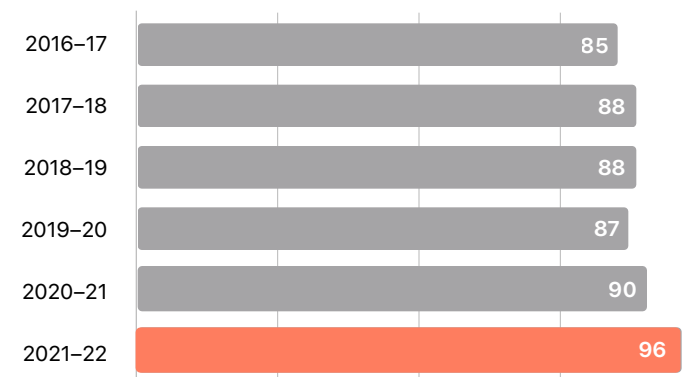
*Ciudad de México, Mexico*

This private international Catholic K–12 school began their one-to-one program in 2014. The school produces a podcast to discuss issues in the community with a variety of guests. A 2020 survey at Highlands found that 98 percent of educators agree that iPad is useful in their lessons on a daily basis. And despite the challenges of at-home learning, the school has recorded a 96 percent retention rate and enrolled about 300 new students since 2020.

New enrolees



Retention rates



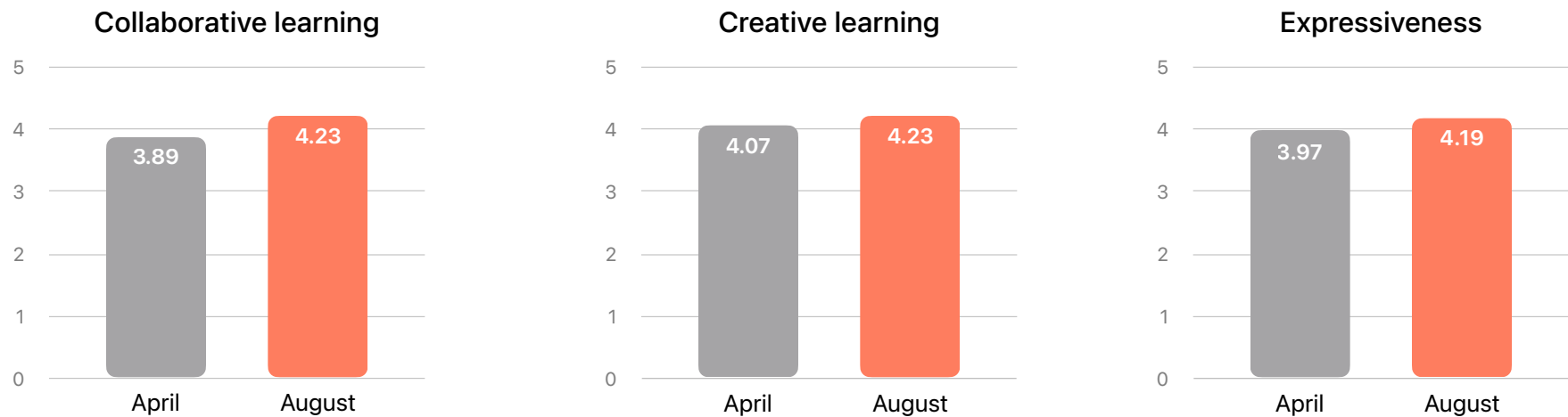
# Shotoku Gakuen Junior and Senior High School

*Tokyo, Japan*

At this private high school, students are encouraged to think as global citizens. They study abroad in New Zealand and Canada to learn and practice English, giving them meaningful opportunities to experience different cultures, reflect on their place in the world, and expand their views. Each student receives an iPad, Apple Pencil, and MacBook to engage with their learning and connect to the world.

The school's STEAM curriculum focuses on cross-curricular problem-solving and creative output. In June 2021, the school hosted Shotoku Tech Academy to offer classes and workshops on Swift Playgrounds and app development.

Research conducted by the school in 2021 found that, as an outcome of their philosophy — including their use of technology — collaborative learning, creative learning, and expressiveness among students increased over the course of the year.



Based on responses to a 2021 survey indicating degree of agreement using a five-point Likert scale.

## West Ferris Intermediate & Secondary School

*North Bay, Ontario, Canada*

At this public school for grades 7 to 12, each STEAM student works with three devices: iPad, MacBook, and iMac. The school has developed an iCoach class where student leaders serve as educational assistants and peer mentors. These students **collaborate** with teachers to help them create and deliver lessons using Apple apps like iMovie and Keynote. As part of West Ferris's outreach efforts, iCoach students also run workshops to teach younger learners at neighboring schools how to use Apple technology.

iPad and Mac have provided a reliable platform that allows for **engaged** and uninterrupted learning, even when students and educators are working at home. As science and STEM teacher Bryan Brouse notes, "With Apple products it becomes quite seamless: I am getting high-quality work and students are asking me if they can do more . . . and that's not something I'm used to."

As an example of their learners' **achievement** supported by Apple technology, the school's STEAM students are outperforming their peers on local assessments and standardized provincial testing for grades 9 and 10.



**"With Apple products it becomes quite seamless: I am getting high-quality work and students are asking me if they can do more . . . and that's not something I'm used to."**

**Bryan Brouse**

West Ferris Intermediate & Secondary School

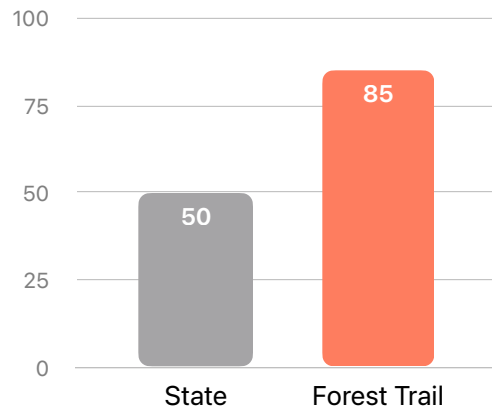
# Forest Trail Elementary

*Austin, Texas, United States*

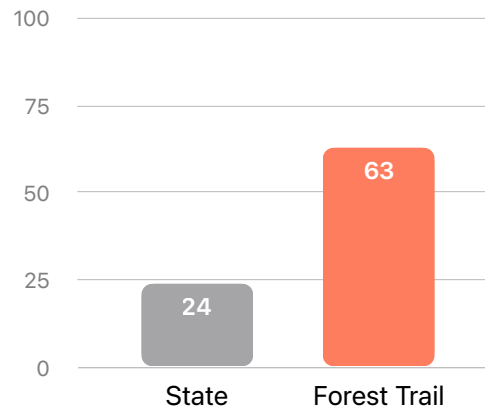
This public K–5 school has a one-to-one iPad program for students. Teachers are equipped with iPad, Apple Pencil, and MacBook, and classrooms are outfitted with Apple TV. At Forest Trail, teachers with younger students are using Apple Pencil and [AirPlay](#) in the classroom to instruct and model solutions in handwriting lessons collaboratively with the whole class, in real time.

On the most recent statewide assessments, Forest Trail students outperformed their peers in all subject areas.

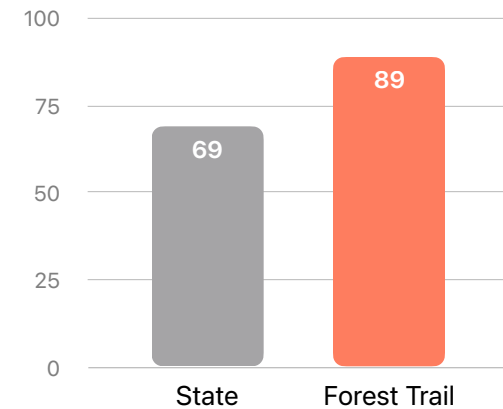
**STAAR performance rates at Meets Grade Level or above**



**STAAR performance rates at Masters Grade Level or above (all grades tested)**



**Academic growth score ELA/reading and math (all grades tested)**



## East Hills Girls Technology High School

*Panania, New South Wales, Australia*

All students and staff at this high school use iPad and Apple Pencil. In grades 10 to 12, students are assigned their own MacBook. Deputy principal and English teacher Zeinab Hammoud shares that “by using iPad and Apple Pencil, feedback becomes immediate” when marking student essays and other work, and that for students, “the transferring of information is timely, and that’s powerful.”

With the school’s long-standing one-to-one initiative and Apple technology as a common platform, staff and students were prepared to move to at-home learning with ease in 2020, and they used their devices to stay connected through online events. Staff has also reported a more streamlined process for proctoring state and national assessments due to students’ familiarity with their devices.

## Western Primary School

*Harrogate, North Yorkshire, United Kingdom*

At this school for students from nursery to year 6, AirPlay has become a tool for peer learning and assessment in the classroom. As one teacher puts it, “Using AirPlay in the classroom means the children can share their work instantly and collaborate to help them improve their writing.”

Staff members have efficiently integrated iPad into their lesson design and delivery. In a recent school survey, 100 percent of staff members surveyed agreed that iPad has helped reduce their workloads.

And parents recognise the benefits of putting a device in the hands of every learner. The same school survey found that 95 percent of parents agreed that iPad has increased their student’s motivation. As one parent shares, “iPad has allowed our children unparalleled access to their teaching resources and ensured that they have remained engaged and motivated.”

**“Using AirPlay in the classroom means the children can share their work instantly and collaborate to help them improve their writing.”**

## Jesmond Gardens Primary School

*Hartlepool, United Kingdom*

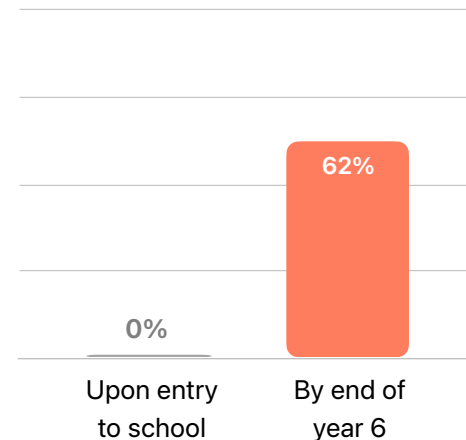
Since 2014, every student at this public primary school has used their own designated iPad. Head teacher Phil Pritchard states that “the staff and pupils’ creative and innovative approach using Apple technology provides a stimulating, inspiring curriculum that empowers children to be the best learners they can be.”

Teachers use iPad features like Voice Memos and accessories like Apple Pencil to provide personalised digital **feedback** on student work. One instructor states, “I’m able to give students feedback via voice notes, and I can use my Apple Pencil which makes it much more personal because the children hear my voice, play it over again so they’re fully understanding, and ultimately making my marking more effective and giving the children a better learning experience.”

While the school is in a region that’s among the top 10 percent of the most underserved areas in the country, school officials cite their innovative campus, dedicated instructors, and long-standing technology integration as some of the drivers of their students’ **achievement**. Upon entering school, 100 percent of students are below the expected standards in all areas — reading, writing, and maths — but by the end of year six, 62 percent are at the expected standards.



### Students at expected standard in all subjects





A photograph of a female teacher with long blonde hair, wearing a light-colored button-down shirt, sitting at a desk. She is looking down at a tablet held by a young male student with short brown hair, wearing a light blue polo shirt. The student is also looking at the tablet. On the desk, there is an open spiral notebook and another tablet. The background is a classroom setting with a window, a potted plant, and a globe.

# Academic Achievement

**"We are preparing students for the real world  
before they are even in it, thanks to Apple."**

**Pam Harris Hackett**

Faculty Member

Southern Methodist University Meadows

School of the Arts, Dallas, Texas, United States

## Colégio de Lamas

*Santa Maria da Feira, Portugal*

This independent K–12 school has seen an improvement in student motivation since introducing Apple devices in 2017 — 70 percent of students report feeling more motivated in creative writing projects when using iPad, and 89 percent report feeling happier and more gratified in their own overall learning process. Colégio de Lamas reports that, with students' increased enthusiasm and deeper learning experiences, student performance on national exams is 20 percent higher than the countrywide averages.

# 20%

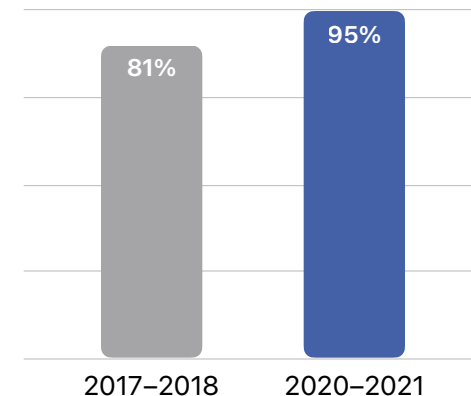
higher student performance  
on exams compared with  
countrywide averages

## Haywood Early College

*Clyde, North Carolina, United States*

Since introducing their one-to-one iPad program, this public high school has seen student ACT composite scores improve. During that time, graduation rates have also increased — from 81 percent in the 2017–2018 academic year to 95 percent in the 2020–2021 academic year.

Graduation rate



## Fairmont Elementary

*Sanger, California, United States*

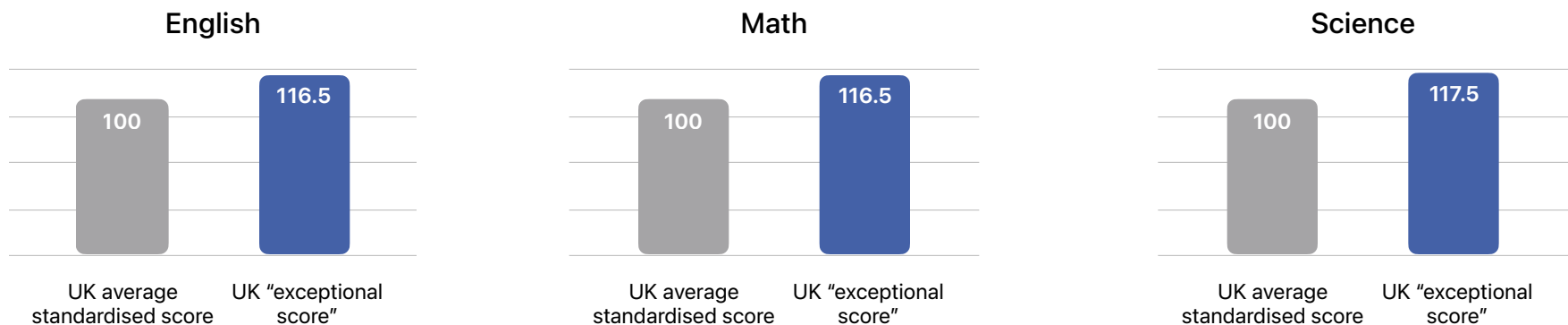
Fairmont Elementary is located in the County of Fresno's Central Valley, a predominantly agricultural area, and their curriculum includes an agricultural STEM program. The school has incorporated iPad into the program's coursework as a durable and mobile device that's suitable for taking out into the field for recording, analysing, and tracking plant growth.

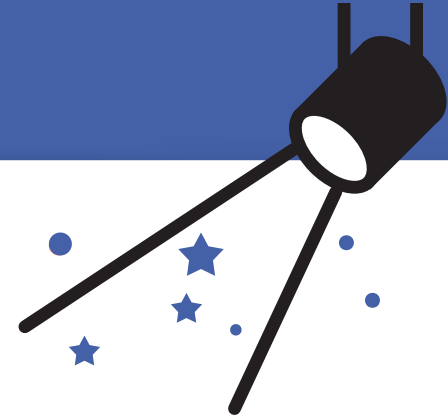
Using iPad to collaborate and research, students at this K–8 public school participated in and won the Student Spaceflight Experiments Program, competing against 85 other teams. As a result, their project was sent to the International Space Station in 2018.

## Repton Al Barsha

*Dubai, United Arab Emirates*

At Repton Al Barsha, students work one-to-one with iPad, teachers use iPad and MacBook, and classrooms are equipped with Apple TV. Since integrating Apple devices in 2015, this private school for early learners to year nine has seen steady improvement in the percentage of students performing above average. In 2020, 90 percent of students were achieving above average in all subject areas. Compared with the UK average standardised score of 100 — with 115 and above considered "exceptional" — students average 116.5 in English, 116.8 in maths, and 117.5 in science.





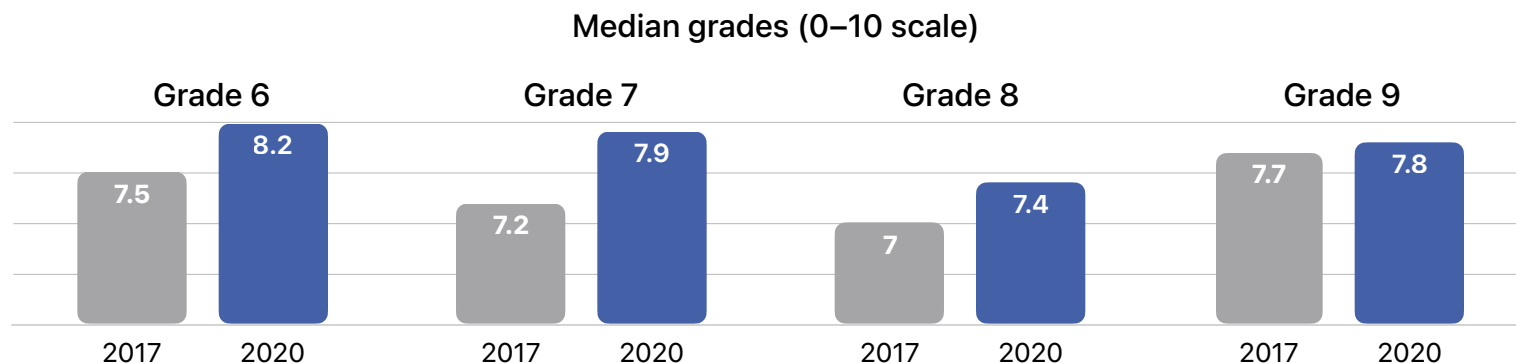
## Colégio Bandeirantes

*São Paulo, Brazil*

At this private secondary school with more than 2600 students, Apple Pencil has been an indispensable tool for educators. Faculty use Apple Pencil to correct, comment, and provide **feedback** on student work. They also use it to produce video lessons, presentations, and other learning materials — and with support from the school's publication team, they've developed 5500 digital book pages and more than 10,000 instructional videos.

Equipped with iPad, students connect and **collaborate** with peers at their school and around the world. STEAM students use design and prototyping apps to work together on project-based learning activities. Eighth-grade Spanish-language students use iMovie to edit and produce museum tours, then make these virtual field trips available to the school community. Students in environmental finance and impact investing courses practice listening and conversing in English by using iPad to video chat with representatives at international NGOs.

Since the school's digital initiatives began in 2014, median grades for students in years six to nine have steadily and consistently improved, demonstrating **achievement** even throughout periods of at-home learning.





## Colégio E.Péry & Tia Min

*São Paulo, Brazil*

This private K–12 school began their iPad initiative during the 2019–2020 academic year. Since then, the school has reported an 18 percent increase in creative activities in the classroom and 50 percent more collaborative activities.

The school has also incorporated iPad for reading — and since doing so, they've recorded a 155 percent increase in the number of books students and faculty have read.

In addition, with more digital resources available on iPad, Colégio E.Péry & Tia Min has been able reduce printing at the school by 85 percent.



↑155%

increase in books read

## Ross Middle School

*El Paso, Texas, United States*

This public middle school for students in grades six to eight is the area's regional school for the Deaf. Of their students, 75 percent are considered economically disadvantaged and one-quarter are English-language learners.

While district-level trends showed that student performance on high-stakes exams declined significantly at the middle school level, eighth graders in Ross's Deaf Ed program are closing the achievement gap. Using accessibility features on MacBook Air, the school's Deaf Ed instructor has updated the program, and as a result, 100 percent of Deaf students at Ross passed the state academic readiness assessment in 2021 on their first attempt.



100%

of Deaf students at Ross passed the state's academic readiness assessment on their first attempt in 2021

## Latin American School

*Monterrey, Nuevo León, Mexico*

This private K–9 school credits iPad and Apple technology as essential to their success in expanding project-based learning, transitioning to at-home learning, and implementing flipped instruction — where students watch video lectures at home to learn the material, then apply that learning to their work in the classroom.

Since Latin American School introduced their one-to-one iPad program in 2012, students have participated in more national and international competitions for math, physics, creativity, and design, where some students were awarded gold and silver medals. Also in that time, the school has seen an increase in the number of students awarded scholarships from prestigious local high schools — between 20 and 40 percent of students annually.

# 20–40

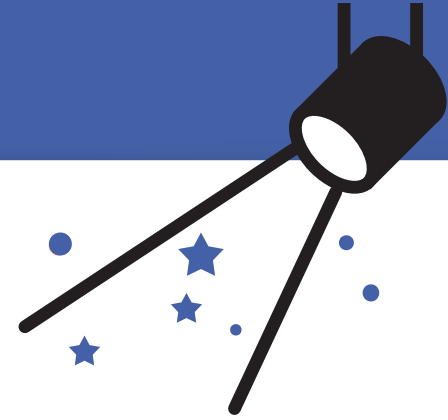
Students awarded scholarships from  
prestigious local high schools

## Singapore American School

*Singapore*

Since 2011, students at this pre-K to grade 12 independent school have been assigned their own Apple devices — younger students use iPad, and middle and high school students use MacBook. Students engage with the community and stay connected to the campus — one of the largest in the world — through their personal devices, service learning, and hundreds of school clubs.

In elementary school, students learn with AR and code using Swift Playgrounds. High school students are offered over 40 university-level courses. This includes over 20 Advanced Placement courses and over 20 Advanced Topic courses, which are university-level courses designed by Singapore American School faculty in collaboration with university faculty.



## Centennial Middle School

*Yuma, Arizona, United States*

Educators at this public school for grades seven and eight incorporate Apple technology for flipped instruction and video lectures, which students can watch at their own pace on their iPad devices — freeing up more time in class for them to **engage** in hands-on activities and problem-solving.

The school has been able to **motivate** students to use technology responsibly, reducing disciplinary incidents related to technology by 83 percent. They were also awarded Common Sense School status by Common Sense Media for 2020–2022.

At Centennial, every faculty member is an [Apple Teacher](#). In terms of student **achievement**, incorporating Apple devices into flipped instruction has contributed to 100 percent of learners attending and excelling in college-level algebra.

# 100%

of faculty members are  
Apple Teachers

# 100%

of students attend and excel  
in college-level algebra



# Productivity and Efficiency



**"The versatility and opportunities that Apple products offer our school community mean that iPad is the device of choice to support our school vision."**

**Lana Menadue**

Digital Coach

Bakewell Primary School

Palmerston, Northern Territory, Australia

A variety of institutions from pre-K to higher education have seen improvements in their resource savings since working with the Apple ecosystem. Digital inking, instructor-designed materials, and ebooks are reducing printing and textbook costs. And having a common work platform has enhanced staff efficiency and institutional research savings.

## Jakarta Intercultural School

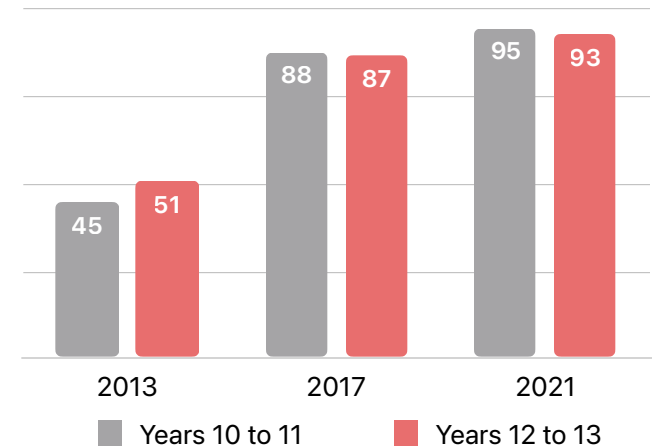
*Jakarta, Indonesia*

At this private coeducational institution for pre-K to grade 12, a 2020 school survey shows that 93 percent of faculty, students, and parents “strongly agree” or “agree” that the school’s implementation of Apple technology fosters effective teaching and learning.

Sinta Sirait, the school’s chief financial officer, describes how staff and student workflows employ the Apple ecosystem: “Teachers manage their daily work with Apple [Classroom](#), students share Keynote presentations with Apple TV, and we all share documents and pictures via AirDrop. Simply stated: We spend no time trying to get technology to work, and our focus is streamlined on learning.”

High school principal Dr. Clint Calzini summarizes, “Our Apple one-to-one program allows our students to focus on creativity, their passions, and supporting one another, without battling technology.”

Percentage of students agreeing with the statement: “iPad has had a positive impact on my learning”



## Athénée Royal de Nivelles

*Nivelles, Belgium*

Educators at this public secondary school make the most of Apple Professional Learning offerings — as well as iPad and Apple Pencil — to innovate instruction. They produce a number of ebooks, videos, and other paperless teaching materials, helping the institution drastically reduce textbook and printing costs. By developing their own digital learning materials, staff members can easily modify, adapt, and personalise resources for more accessible and inclusive lessons. And during periods of at-home learning, these instructor-created resources have made it easier for students to access content and stay connected to their learning, with 95 percent of courses available online.

95%

of courses are  
available online

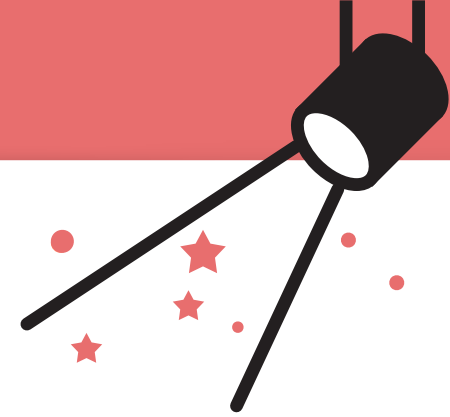
## Maryville University

*St. Louis, Missouri, United States*

In 2015, this private college launched their iPad initiative and increased their emphasis on digital curriculum. Since then they've successfully scaled up their program, and they now provide students with an Apple Pencil and Smart Keyboard, too.

After implementing iPad, Maryville compared software licensing costs associated with two different apps for schools. IT staff and administrators found that licensing was up to 99 percent cheaper for the iPad versions than the same number of licenses for the PC versions.

Maryville has also seen full-time undergraduate enrolment increase significantly since providing students with iPad — up 58 percent from 2014 to 2021.



## Malton School

*Malton, North Yorkshire, United Kingdom*

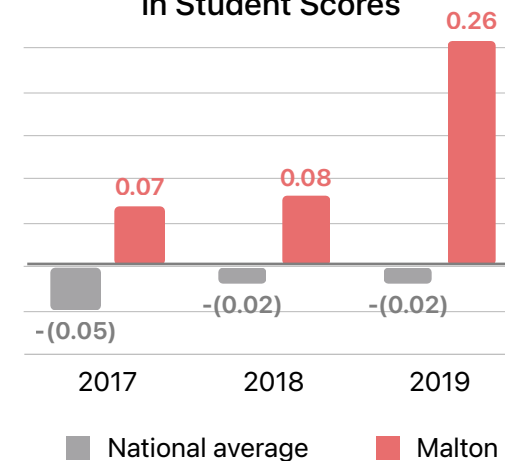
At this comprehensive school for students aged 11 to 18, 100 percent of teachers use Apple Pencil for markups and **feedback** on student work. Digital inking has transformed the school's feedback delivery and enabled faculty departments to become more **efficient** — some have even gone entirely paperless. As one teacher notes, "Apple Pencil has fundamentally changed my teaching practice. I am now 100 percent paper-free."

Educators have also taken advantage of the activities in support materials like [Everyone Can Create](#) and [Everyone Can Code](#) to **engage** learners. As instructor Damien Ferrari states, "The advantages of Apple and Malton School's adoption within a learning and teaching environment were abundantly clear, and I was immediately inspired to champion the accessibility and equality of opportunity afforded by iPad devices and the Everyone Can Create and Everyone Can Code curricula, which allow an individual to express themselves creatively, and the ability to learn and teach in different ways supporting diversity and learning styles." From 2020 to 2021, instructors delivered 3860 hours of lessons using Everyone Can Create activities.

And the student outcomes speak volumes. In a 2021 school survey, 97 percent of students attribute their academic **achievement** to using iPad, and GCSE and A-level assessments show improved student progress since the school implemented their one-to-one iPad program.

**"Apple Pencil has fundamentally changed my teaching practice. I am now 100 percent paper-free."**

**GCSE Improvements  
in Student Scores**



## The de Ferrers Academy

*Burton upon Trent, Staffordshire, United Kingdom*

This academy enrolls students in years 7 to 13 across its three campuses. In the 10 years since the school deployed Apple technology, the administration has observed more efficient use of resources and savings of more than £1 million due to moving from traditional, fixed technology to a more mobile deployment with iPad.

And now that 95 percent of lessons include iPad, multiple years of school survey data show that more and more students agree that iPad has had a positive impact on their learning.

£ **1** MILLION

in resource savings since  
deploying iPad

## Kolbe Catholic College

*Rockingham, Western Australia, Australia*

At this private school for years 7 to 12, administrators are observing that lessons and lesson presentation have been streamlined since staff began using iPad instead of laptops. Jody Rubery, the school's director of professional practice and learning, notes that "by giving staff the same device that our middle school [students] use, they are now able to design better learning experiences for the students and better understand the full scope of the ways students can demonstrate their learning on iPad."

Rubery goes on to say, "The impact of iPad has been enhanced even further since 2020 with the introduction of iPad Pro for our year seven students. The addition of the keyboard and Apple Pencil have been a game changer. [And] as student capacity with iPad grows, we have noticed students naturally transfer their skills across learning areas to demonstrate their learning."

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## Mount Sinai College

*Sydney, New South Wales, Australia*

Faculty at this K–6 school have integrated the Schoolwork app, flipped instruction using videos created with iPad and Apple apps, and digital markups using Apple Pencil on iPad to streamline their workflows. As one educator explains, “Having the option of flipping the classroom with video-modelled instructions and being able to give digital feedback on students’ work without disrupting them can help me as a teacher reach more students.”

## Prescot Primary and Nursery School

*Liverpool, United Kingdom*

Of Prescot’s population of students, 15 percent have disabilities and 30 percent are eligible for pupil premium — a government initiative in the UK intended to provide schools and underserved students with resources to close the achievement gap. As Deputy Head Lisa Seddon notes, iPad assistive features “allow these children access to all areas of the curriculum. iPad also improves their engagement to take ownership and learn at their pace . . . all children feel that they can access all aspects of school life, and iPad is essential for that.”

Mrs. Seddon speaks to the value of using iPad to help build students’ literacy skills, wherever they’re learning: “We’ve found that access to digital books raises the profile of reading in our school and also helps readers who may not have been that keen to read . . . Students take home over 6000 books in their iPad every day. This is something that we could not have done before, and it has transformed our approach to reading in the school.”

Equipped with ebooks and iPad accessibility features, Prescot students read nearly 16,000 books from 2020 to 2021 — and during that time, they surpassed national averages for reading expectations at all grade levels.

Students read almost

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## Delaware State University

*Dover, Delaware, United States*

Over 5050 students are enrolled at Delaware State University (DSU) — and of the more than 4300 undergraduates, 44 percent are eligible for Pell Grants, 99 percent receive financial assistance, and 51 percent are first-generation college students; additionally, a high number of students are identified as Dreamers.

DSU's academic departments incorporate Apple devices in a number of **engaging** ways. Within the first week of computer science courses, freshmen use MacBook to program robots. Business majors use iPad on the school's digital trading floor. In the department of nursing, students use iPad to learn anatomy and prepare for national certifications. In biology, 90 percent of textbooks and course materials are available through ebooks and open educational resources — reducing students' textbook expenses. And because of their shared platforms, students and faculty have been able to more **efficiently** deliver 100 percent of dissertation defenses virtually during at-home learning periods.

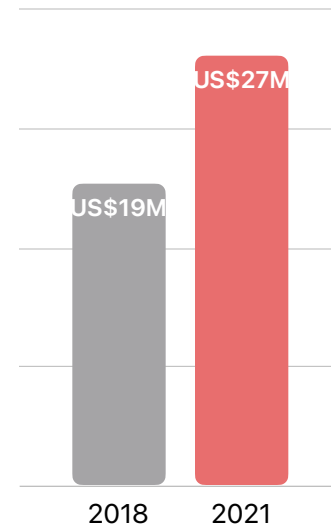
Through their contemporary, high-quality, low-cost education, DSU is committed to equipping all students with the skills and training to **achieve** in their future careers. The university prepares more of Delaware's teachers, nurses, social workers, and accountants of colour than any other school in the state, and they prepare the most professional pilots of colour in the nation.

Since DSU began their one-to-one initiative in fall 2018, they've seen a 6 percent jump in freshman retention. As of 2021, the school's freshman retention rate sits at 80 percent — more than 10 percentage points greater than the overall average of all HBCUs.

The school also credits everyone's access to common technology platforms as a major asset in streamlining and increasing research **productivity**, which has grown from \$19 million annually in 2018 to \$27 million in 2021.



### Research productivity







The data shown in this document is self-reported by the institution — Apple was not involved in the gathering or analysis of the data reported, nor has any knowledge of the methodology used. This document highlights the results or trends institutions using Apple products have observed, along with anecdotal accounts that communicate the positive impact iPad and Mac are having on instruction in the classroom.

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