Seeing the bigger picture

EPSON®

Technology for connected learning

Epson understands education. For many years, we've been providing customers with a wide range of solutions designed for the evolving needs of the sector, developed by listening to what teachers want and what students require. We use this knowledge to design technology that makes teaching and learning uninterrupted, consistent and efficient.

Our solutions connect collaborative groups, capture attention and empower both teachers and students.

The four essential skills of today's students

Communication
Effective communication skills allow students to express their thoughts and ideas clearly, connect with a wide range of audiences, and hold meaningful conversations that increase shared understanding.

Collaboration
In today's connected world, the ability to collaborate leads to shared perspectives, collective progress and innovative solutions to complex challenges.
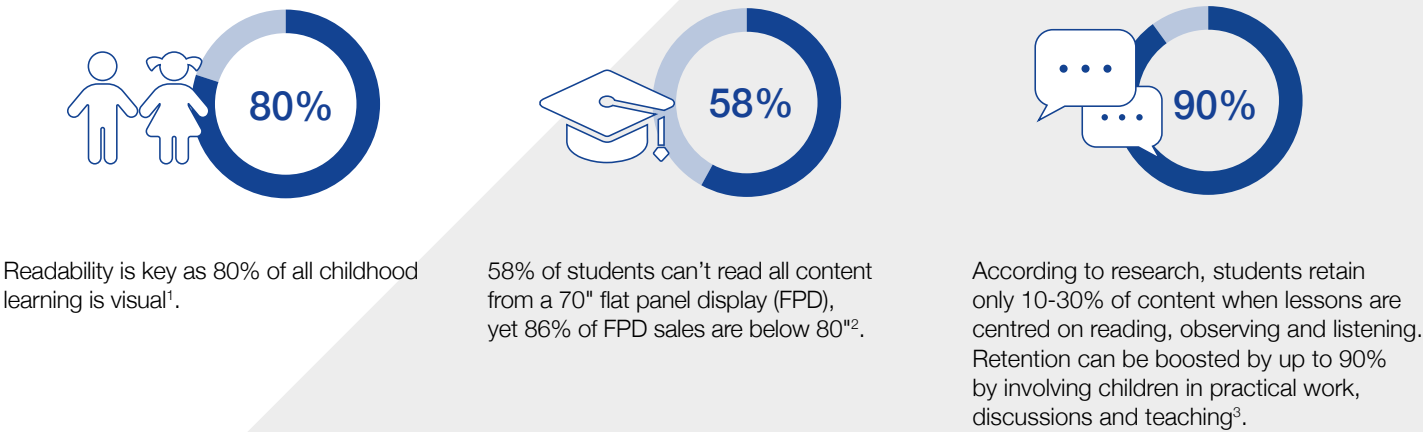
Creativity
Creative thinking helps students see new possibilities, tackle problems in new ways and find new solutions that push the boundaries of learning.

Critical thinking
Students who think critically analyse information rigorously, challenging assumptions and making well-informed decisions.

Why visual learning makes all the difference

80%

Readability is key as 80% of all childhood learning is visual[1].

58%

58% of students can't read all content from a 70" flat panel display (FPD), yet 86% of FPD sales are below 80"[2].

90%

According to research, students retain only 10-30% of content when lessons are centred on reading, observing and listening. Retention can be boosted by up to 90% by involving children in practical work, discussions and teaching[3].

The advantages of Epson projectors

Improved efficiency and less power usage
Epson projectors typically achieve low power consumption, with projector management software improving efficiency further. Not only that, choose Epson projectors and you're choosing to work with a technology partner that's committed to conserving environmental resources, reducing waste, and using recycled resources.

Unrivalled service, support and reliability
With our projectors, you enjoy best-in-class service and maintenance, and local language support. Long usage lifecycles keep downtime to a minimum, and up to 5 year warranty is included for additional peace of mind.

Total flexibility for every learning environment
Unlike FPDs, projectors do not have one fixed display size. Projectors can deliver any size display, scalable up to 1,000". Ensuring everyone can see the content clearly.

1,000"
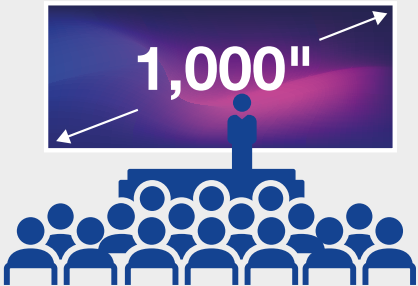
Unrestricted viewing
Unlike FPDs, Epson projectors have no blind spots or restricted viewing angles. This makes it easier to see content, even from the sides of a room. They're also free from glare, reflections and fingerprints.

Enhanced learning experiences
Epson projectors put the student at the centre of learning, as well as adapting to a range of teaching methods. They enable hybrid education, combining analogue and digital approaches, to provide the ideal balance of fast digital thinking and more analytical, literature-based learning.

Ease of use
Our display solutions offer flexibility and are easy to use. They also deliver plug-and-play functionality, so teachers don't have to rework their lessons to adapt to new software, or face difficulties with new laptops and Windows OS.

Split-screen capabilities without any software
Epson projectors allow you to show content in a split-screen configuration (up to 4 inputs), without the need for any additional software.

100"
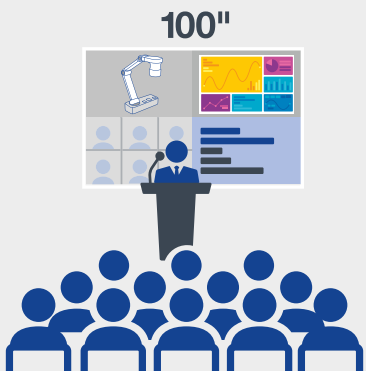
Comfortable vision
FPDs emit light that appears much brighter and may cause eye fatigue when you view them for long periods of time. Epson projectors produce indirect light with no reflection and clear viewing from every angle making for a more comfortable experience.

Direct light

Indirect light
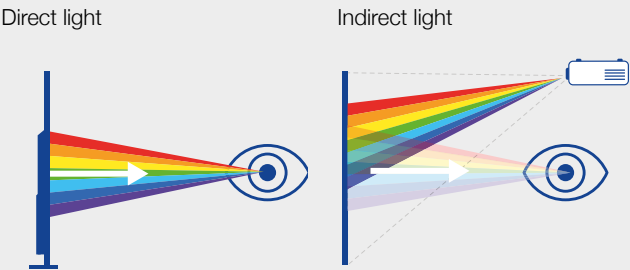
Optimising your solution

For the best teaching and learning experience, your displays must adapt.

Replicate the desktop experience

The optimal display size should provide those furthest away with the equivalent view of a comfortable desktop experience.

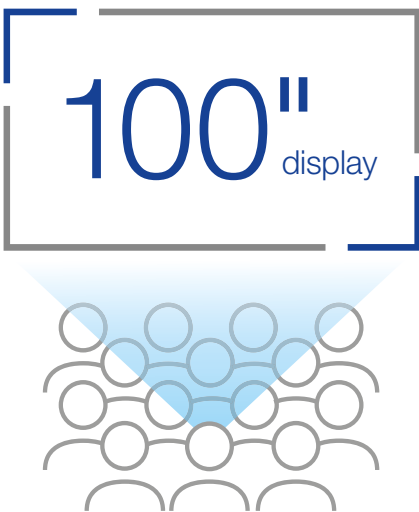**Adapt to the length of the room / number of participants**

Give everybody the same opportunity to share and engage with the ideal display size for your meeting.

Feels like a 14" monitor

60"_{display}

Feels like a 25.2" monitor

100"_{display}
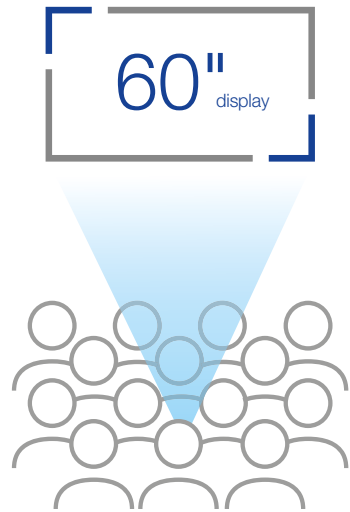
Based on a room size of 4x3 metres

Increase of myopia in adolescents

Twice as many as 50 years ago, due to progressive digitalisation and less time outdoors[4].

50%

A scalable display from a single Epson projector – at one, fixed cost

Epson projectors allow you to scale your display size to ensure your content is always clearly visible to all, regardless of room size.

FPDs offer one fixed size, but with Epson projectors you have the flexibility to scale displays in any size up to 1000", and in multiple aspect ratios, for varying viewing distances.

100"
70"
65"
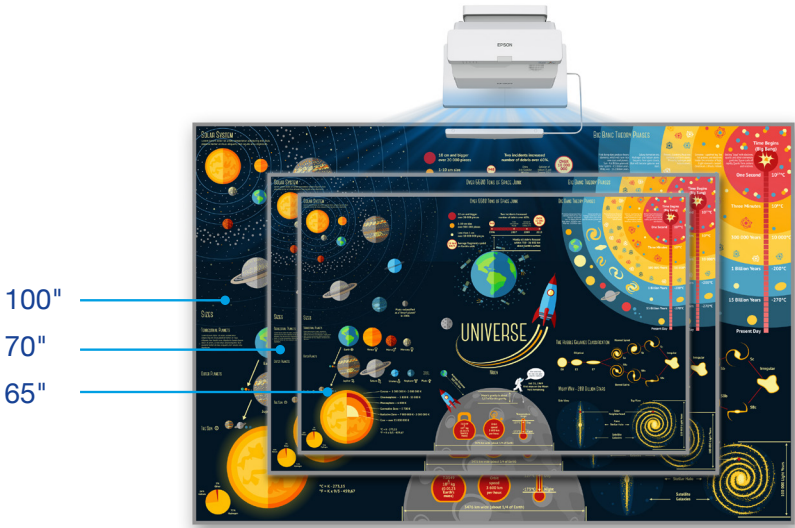
Scale to suit your space

Use the chart below to find the optimal display size for your teaching/ learning space. Simply look up the room length on the left and scan across.

Room length (m)	50" display	55" display	60" display	65" display	70" display	80" display	100" display	120" display	150" display
1.8									
2.0									
2.1									
2.3									
2.4									
2.6									
2.7									
2.9									
3.0									
3.2									
3.4									
3.5									
3.7									
3.8									
4.0									
4.1									
4.3									
4.4									
4.6									
4.7									
4.9									
5.0									
5.2									
5.3									
5.5									

Extra large
This size will create an experience significantly bigger than a desktop experience

Excellent visibility
This will deliver a room experience that is equivalent to a desktop experience

Acceptable
This meets minimum standards, but is not equivalent to a desktop experience

Not recommended
This is a poor experience that does not meet any standards

Note: Displays smaller than 80 inches are assumed to be 16:9, displays 80 inches or larger are assumed to be 16:10.

Adapting to your teaching style

Thanks to the versatility of Epson projectors, you can create an ideal combination of both traditional and digital classroom setups.

When compared to a FPD, a projector offers greater flexibility and more continuity, with faster switching between the projected image and whiteboard surface.

When the projector is off, the regular whiteboard is available, with teachers and students able to use the surface for other purposes, with whiteboard markers or magnets, for example. This helps teachers move seamlessly between analogue and digital learning.

Whiteboards are also easy to maintain and keep clean with no more than water and a sponge. This allows for unrestricted interactivity and no need for replacement if the surface gets dirty or damaged.

When the projector is on, the projection surface is your 'digital whiteboard' operated by finger or interactive pen.

Flat Panel Displays in schools could be at risk of damage due to accidental impacts or improper handling. Their accessibility makes them more vulnerable in environments where children interact with the equipment frequently. This can lead to costly repairs or replacements, adding unnecessary strain to school budgets.

Projectors offer a safer and more durable alternative for educational settings. Mounted securely out of reach, they significantly reduce the likelihood of physical damage. This not only ensures the longevity of the equipment but also minimizes disruptions to the learning process caused by malfunctioning displays.

From a safety perspective, projectors are also better suited for classrooms with young students. Their placement away from direct contact ensures a safer environment for children while still delivering high-quality visuals and an engaging learning experience.

Product environmental data for Epson's agile collaboration displays

	EB-685W	EB-685Wi	EB-695Wi	EB-760W	EB-760Wi	EB-770F	EB-770Fi	EB-1485Fi	EB-810E/ EB-815E*
Image size	100''	100''	100''	100''	100''	100''	100''	100''	160"
Light source (lamp/laser)	Lamp	Lamp	Lamp	Laser	Laser	Laser	Laser	Laser	Laser
Lumens (lm)	3500	3500	3500	4100	4100	4100	4100	5000	5000
Life of the light source (hours, normal mode)	5000	5000	5000	20000	20000	20000	20000	20000	20000
Life of the light source (hours, eco mode)	10000	10000	10000	30000	30000	30000	30000	30000	30000
Product weight (kg)	5.7	5.7	5.7	5.9	6.0	5.9	6.0	9.9	12.5
Eco certifications									
Production in an ISO 14001 certified factory[5]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Production in an ISO 9001 certified factory[6]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Production in an RBA certified factory	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electricity									
Normal (watt) On-mode power consumption[7]	301	301	301	197	197	197	197	200	290
Normal by watt - Energy intensity at 100 inch (watt/inch)[7] (EB-810E/EB-815E based at 160 inch)	3.01	3.01	3.01	1.97	1.97	1.97	1.97	2.00	1.81
Eco (Watt) On-mode power consumption[7]	258	258	258	141	141	141	141	195	192
Eco by watt - Energy intensity at 100 inch (watt/inch)[7] (EB-810E/EB-815E based at 160 inch)	2.58	2.58	2.58	1.41	1.41	1.41	1.41	1.95	1.20
Carbon analysis									
CO_2 emissions during use[8] Total usage time: 3.5 hours, 190 days, 5 years $(kgCO_2e)$	261.2	261.2	261.2	171.0	171.0	171.0	171.0	254.3	251.7

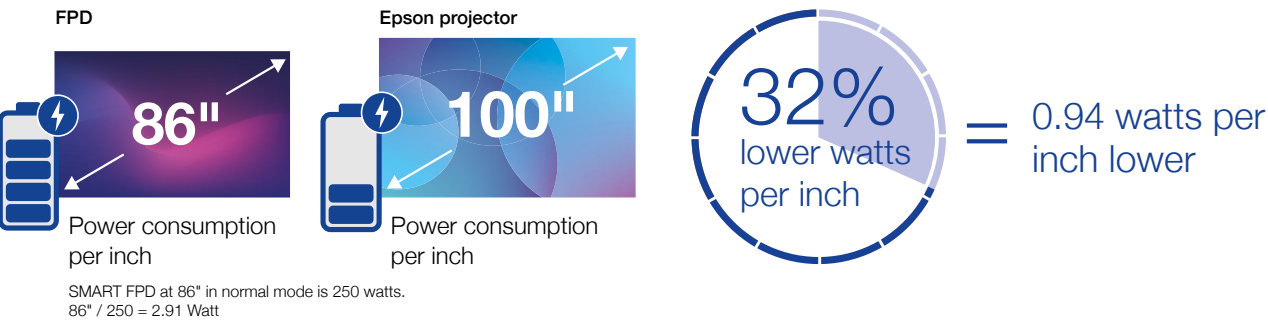*Accessories such as setting plate are excluded.

Epson interactive projector vs interactive FPD

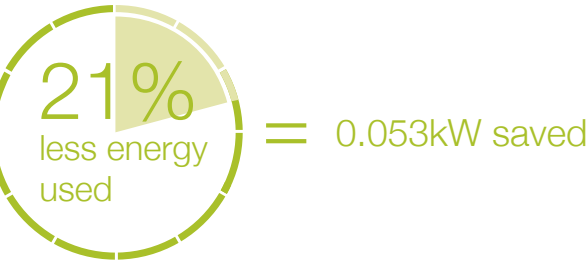## Epson EB-770Fi vs SMART SBID-MX286-V3N

Energy-efficiency, CO_2 emissions and running costs are important considerations when it comes to the technology we use day to day. So how do Epson interactive projectors measure up? Let's look at the EB-770Fi for example:

Reduced energy intensity

Epson EB-770Fi offers a scalable display size up to 100" to demonstrate even bigger energy savings per inch divided by the operational normal watts (197 watts), when compared to the SMART SBID-MX286-V3N.
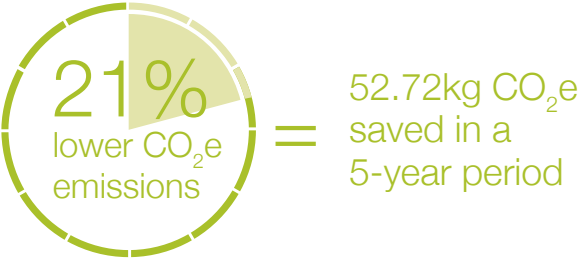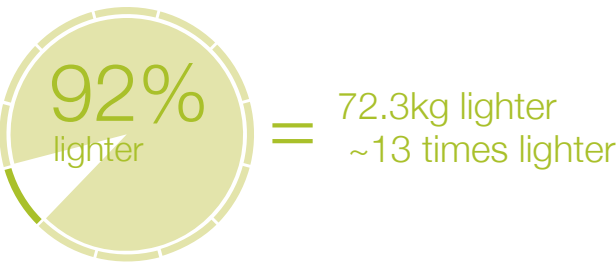

FPD — **86"** — Power consumption per inch

Epson projector — **100"** — Power consumption per inch

32% lower watts per inch = 0.94 watts per inch lower

SMART FPD at 86" in normal mode is 250 watts.
86" / 250 = 2.91 Watt

Lower energy usage

21% less energy used = 0.053kW saved

Reduced electricity (running costs)

21% less energy used = €8.47 saved over a 1-year period

€33.9 saved over an additional 4-year period

*assuming no change to electricity prices

Reduced CO_2e emissions

21% lower CO_2e emissions = 52.72kg CO_2e saved in a 5-year period

Reduced technology weight

92% lighter = 72.3kg lighter ~13 times lighter

Based on Epson calculations, the energy cost and CO_2 emission savings over a 760 hour period (1 year) for 1 x EB-770Fi (100"/2540 mm display size) compared to an installation of 1 x SMART SBID-MX286-V3N (86"/1727,2 mm display size). Energy cost calculated using EU average price for non-household electricity (€ per kWh exc. VAT) according to Eurostat electricity prices for non-household consumers, Second half 2022. CO_2 emissions calculated using the European Union (27) greenhouse gas emission intensity of electricity generation (g CO_2/kWh) according to Our World Data.

1   Building better brains, article "Visual memory, where 80% of learning happens", Lorraine Driscoll, July 2018.

2   Depending on classroom size, Futuresource, FY22 FPD data.

3   Medium, article "How do children learn?", Afzal Badshah, February 2022.

4   HEPI, article "The dramatic rise of myopia in young people", UK, August 2021.

5   The ISO 14001 standard constitutes a framework defining rules for integrating environmental concerns into the organization's activities in order to control environmental impacts and thus reconcile the organization's operational requirements and respect for the environment.

6   The ISO 9001 is a global standard for quality management systems (QMS) that helps organizations meet customer and regulatory expectations.

7   In accordance with ISO/IEC 21118:2020.

8   Based on average CO_2 intensity of electricity in EU-27: 0.261 kgCO2 e/kWh (source: Our World Data).
     Use for 3.5h/day, 190days, 5 years.

For further information, please contact your local Epson office or visit www.epson.com/eme
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