

RECONNECT KENT STEM - 'LESSON IN A BOX'

Following the great success of "Secret Treasures of Kent" this STEM extension project, focused on science and nature, supported children and families to reconnect with their local area, using the rich heritage and stories of Kent, addressing learning gaps in a fun and engaging way.



ATTRACTION PARTNERS

- Biggin Hill Memorial Museum
- Jetstream Tours
- Kent Mining Museum
- Kent Wildlife Trust
- Port Lympne Hotel & Reserve
- Royal Engineers Museum

“ The connection with local attractions definitely generates interest and helps teachers and children become more invested in the activities.

Anonymous Teacher ”

“

"The Lesson in a Box project was an exciting venture to be included in and a great way for Kent Wildlife Trust to share our message about the climate and nature crisis into the schools of Kent and to engage schools in our Wilder Kent Awards scheme, recognising and rewarding schools taking positive actions for the environment. Our winning school showed a great understanding of the task set and showed creativity and ingenuity. Their reward for winning the competition was a class visit to our Romney Marsh visitor centre where they engaged in a variety of activities including mini-beast hunts and forest school crafts."

Tom White, Educational Officer at Kent Wildlife Trust ”

OBJECTIVES

Following great success with the previous project 'Reconnect Kent Lessons in a Box - Secret Treasures of Kent', this extension project aimed to continue the re-connection with children and families to their local area by using the rich heritage and stories from Kent to bring learning to life.

In Visit Kent's Kent resident research, we found that 65% of residents felt more connected to their local area as a result of the pandemic. This project drew on this increased interest in the local area to reengage young people in learning, encourage schools to start educational trips again and inspire families to explore more of what's on offer right on their doorstep.

By supporting teachers with ready-made lesson plans linked to the National Curriculum, we set out to address learning gaps by providing useful and relevant resources, with a focus on STEM. It also aimed to highlight the value of educational visits to local attraction partners.



HOW WE DID IT

1

We engaged six Kent attraction partners in the project to help develop dedicated STEM-focused lesson plans. Kent Wildlife Trust, Jetstream Tours, Royal Engineers Museum, Biggin Hill Memorial Museum, Kent Mining Museum and Port Lympne Hotel & Reserve. Most already have established education teams and existing curriculum-based resources which we drew upon to develop rich and engaging content for the project.

2

Working with attraction partners, we combined the core STEM themes to develop the 'Engineers Assemble' concept. Working with specialist educational tourism consultant, Dominic Wong, lesson plans, resources and materials were developed to meet the KS2 National Curriculum Requirements, whilst using creative ways to address gaps in learning by linking to problems that could happen at participating attractions.

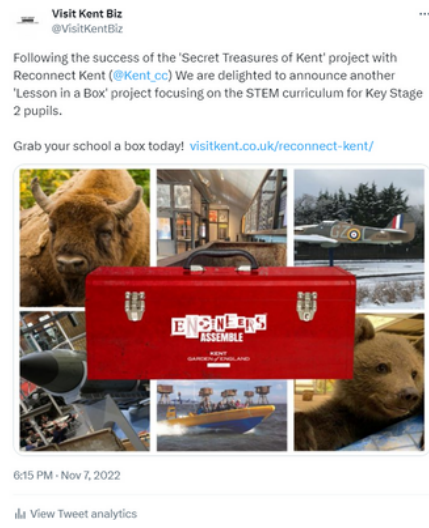
The children were set a number of innovative STEM challenges, requiring them to design and create new models to help the participating attractions come up with a solution to their engineering problems. The winning class groups sent their designs to the participating attractions, who then judged all entries to select a winning school to enjoy a trip for their class.

The six-lesson module aimed to bring excitement, fun and purpose into the classroom, helping children to appreciate their local environment and become mini engineers – thinking outside the box, experimenting and using their knowledge and skills in science, technology and maths to solve real-life problems.



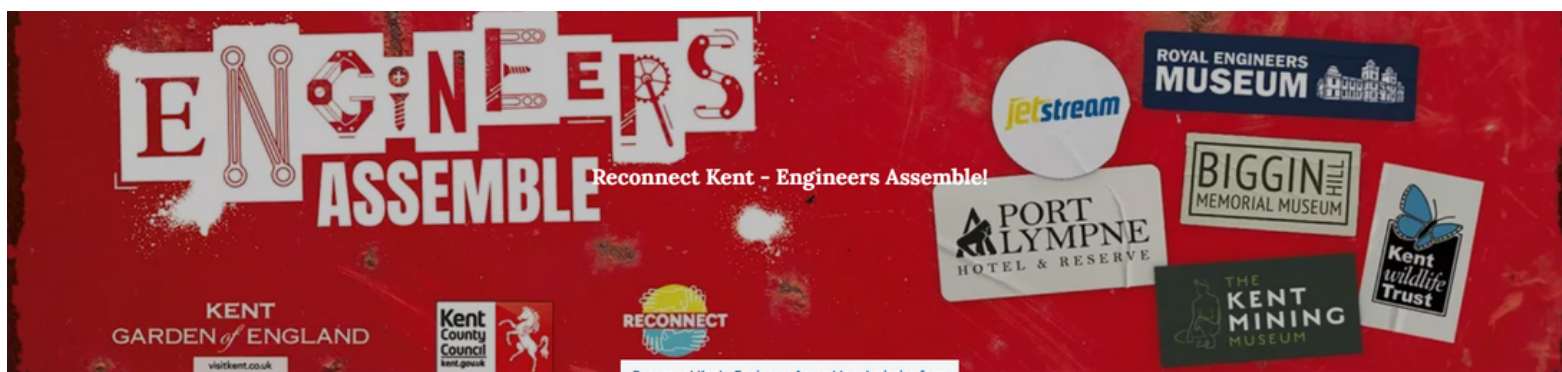
3

We then worked with a local design agency to bring the vision to life. This included an 'Engineers Assemble' toolbox which contained materials, six bags containing a range of information about each attraction to explore, along with resources to build their engineering designs for each site and worksheets provided on a USB. The teachers requested a free box to be sent out to them through an online form and the box was then shipped directly to the school.



HOW WE REACHED CHILDREN ACROSS KENT

We created a letter for Kent County Council to send to schools in different districts outlining the project with information on how to claim a box. Throughout November, we sent out a variety of social media posts on our business channel, calling teachers to claim their free Engineers Assemble toolbox. A [landing page](#) was created providing more information about the project and an application form to collect relevant details.

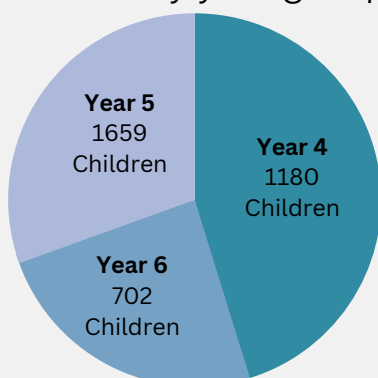


Visit Kent, in partnership with Reconnect Kent, are delighted to announce the return of the successful Lesson in a Box project which delivers a series of engaging Key Stage 2 lessons to fill the gaps left by the COVID-19 pandemic and reconnect children to their local attractions. The newest 'Lesson in a Box' project, entitled 'Engineers Assemble', will focus on engaging children with STEM, transforming children in Years 4 and 5 into professional engineers tasked with solving a hypothetical problem faced by one of Kent's top

3,541

Children took part in the reconnect activities

Breakdown of participating children by year group



*Some schools did not specify what year groups took part

All **120 boxes** were quickly snapped up by Kent teachers

150
Entries

“The children loved the boxes, they inspired the children in a fun way. Having local attractions / companies that the children were familiar with was brilliant. The resources were well thought out and useful as were the lesson plan and powerpoints.”

Anonymous Teacher

“Everything was amazing and really tied in with our STEM learning in school. The children enjoyed the range of activities and the fact that they were local attractions made it more 'real' for them.”

Anonymous Teacher

Breakdown of participating schools by district

- 8 in Swale
- 14 in Tonbridge and Malling
- 4 in Tunbridge Wells
- 16 in Dover
- 10 in Folkestone and Hythe
- 20 in Ashford
- 7 in Maidstone
- 11 in Sevenoaks
- 9 in Canterbury
- 7 in Gravesham
- 9 in Dartford
- 9 in Thanet

*One school did not say

HOW DID THE CHILDREN ENGAGE?

The students designed and created a new animal enclosure for Port Lympne Reserve, a bird feeder made from recyclable materials for the Kent Wildlife Trust, a catapult for the Royal Engineers Museum, a parachute design for Biggin Hill Memorial Museum, a wind turbine at Jetstream Tours and a new pulley for the Kent Mining Museum

At the end of the series of lessons, entries were submitted digitally into the county-wide competition. Winners were then selected by attractions who won a day out to the attraction for the whole class including transport through a local transport provider funded by the programme.

Which schools won?

Kent Wildlife Trust - Brooklands CE Primary School

Jetstream Tours - Royal Rise Primary School

Royal Engineers Museum - Shoreham Primary School

Kent Mining Museum - Woodchurch Primary School

RAF Biggin Hill Memorial Museum - Snodland Primary School

Port Lympne Hotel & Reserve - Victoria Road School



Victoria Road School at Port Lympne Hotel & Reserve



Brooklands CE Primary School entry to Kent Wildlife Trust

“The children loved taking part in the Engineers Assemble, Lesson in a Box project and found the learning resources and tasks engaging. We were so thrilled to have won the trip to Kent Wildlife Trust’s site in Romney Marsh and enjoyed the activities they prepared for us whilst investigating the area. There was a huge range of wildlife to discover which the children really enjoyed searching for and our guide was very informative.”

Mrs O’Neon, KS2 Teacher at Brookland CE Primary School

WHAT HAVE WE ACHIEVED?

The team, attraction partners, consultants and design agency all worked really hard on this project to make sure that the children had fun whilst they were learning and being creative. This is reflected in the feedback from teachers about how well students engaged with the interactive approach to learning. The resources were also designed to be used again in future years.

The project enabled partner attractions to start to rebuild their outreach programmes. They had the opportunity to work with a leading expert in educational programme design and to collaborate with other learning teams around the county. This should improve their educational offer overall.

How did the teachers find the project's concept and contents?

- “ The activities were well linked to the attractions. The information about the attractions was interesting and helped the children see what the places had to offer. Most of the activities were relatively easy to follow and create but required a fair amount of time. ”
- “ I transferred the ideas and resources and linked them to the topic we were studying instead of using the problems and places specified. Children were nonetheless engaged in the tasks. ”

How did the children find the activities set by attractions?

- “ It was brilliant. Really engaged the children. ”
- “ The children were engaged in all aspects. We did this as a full day experience and it held their attention for the whole day. ”
- “ The children enjoyed learning about local attractions ”

What could be improved?

- “ Very difficult to complete the activities in the time scale - we managed it but some of them were very rushed and we really needed to spend longer on them. ”
- “ It would be useful to have some advertising for the places to share e.g. a page with weblinks on to share with parents to encourage/inspire them as well. ”



RESOURCES

1. Lesson 1 Kent Mining Museum Powerpoint

2. Lesson 2 Port Lympne Hotel & Reserve Powerpoint

3. Lesson 3 Royal Engineers Powerpoint

4. Lesson 4 Biggin Hill Memorial Museum Powerpoint

5. Lesson 5 Kent Wildlife Trust Powerpoint

6. Lesson 6 Jetstream Tours Powerpoint

