

The Outdoor Design Project



East of England
**EdTech
Hubs**
Building the
EdTech Community



@ Highfields Primary School, Manningtree

Key Stage 2 Outdoor Space Design via AR

The Year 4 class at Highfields is leading the design of their own new outdoor learning space. To transition from paper plans to reality, pupils utilised iPads and the **Sandbox AR platform** through a highly collaborative process:

- **Inspiration & Annotation:** Pupils photographed the existing Key Stage 1 outdoor area and annotated the images to identify successful features like mud kitchens and planting zones.
- **AR Prototyping:** Using Sandbox AR, the children built 3D versions of their designs, enabling them to scale the models up to life-size. They physically walked through their virtual spaces, recording audio to explain their architectural decisions.
- **Problem Solving & Adaptability:** When specific digital assets (like ponds) were unavailable in the software, pupils creatively found alternatives to represent their ideas.
- **Skill Sharing & Engagement:** The project fostered immense engagement and teamwork. Pupils regularly held feedback sessions to troubleshoot tech issues, teach each other new digital skills, and adapt designs when the AR walkthrough revealed that a layout did not work in real life.

Ultimately, using AR shifted the project from a abstract drawing on paper into a realistic, interactive experience that developed the pupils' critical thinking, collaboration, and digital literacy.

Conclusion & Next Steps

In conclusion, utilising Sandbox AR transformed the Year 4 outdoor design project from a static paper exercise into a dynamic, life-sized reality.

The immersive technology not only allowed pupils to prototype and critically evaluate their architectural ideas in real time, but it also fostered essential life skills like creative problem-solving, peer-to-peer teaching, and deep collaboration.

By combining hands-on outdoor exploration with cutting-edge digital tools, Highfields Primary School successfully demonstrated how technology can elevate student voice and engagement in the physical development of their school environment.

Find out more about the Sandbox Platform and see other inspirational uses at

<https://sandbox.lgfl.net>