CAST BRIEFING 50 - November 2026



Beyond getting from A to B: Understanding how children envision the future of transport using arts-based methods

Key messages:

- **Children value more than just being able to get from A to B.** They want transport systems that meet other needs and align with their values.
- **Today's children are tomorrow's transport users.** Young people are actively engaged in the world around them and have views on how they travel. Considering such views could improve social planning and support a 'just transition'. Therefore, children should be considered as stakeholders in transport consultations.
- **Junk modelling is a practically feasible method for research with young participants** – it requires little time or resources and helps to engage children and create meaningful outcomes.

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Background and context

This briefing is intended as a resource for policymakers, transport planners, and anyone interested in children's citizenship and arts-based public engagement.

Significant improvements to public transport and infrastructure are required to decarbonise the UK's most emitting sector. Approximately £10bn per year will be needed to enable people to travel more sustainably. Current mobility and transport planning predominantly focuses on adult perspectives, despite the fact that today's children will be the primary users of future transport systems. The United Nations Convention on the Rights of the Child recognises children's right to be consulted on matters affecting them. Children also have the capacity to make sense of the world around them, meaning that their unique perspectives may provide valuable insights for societal planning.

Research on this topic tends to centre on adults. The few studies that do focus on children explore activity levels, health and environmental influences. Very little attention has been given to how children conceptualise and imagine the future of mobility. CAST researchers conducted a study to address this gap, using creative art-based methods to explore how children aged 4-15 envision the future of mobility, to support more inclusive sustainable transport planning.

Recommendations

Based on our findings, we recommend that transport planners and policy makers:

1. **Design transport for experience, not just efficiency.** Children envision a future in which transport allows them not just to travel, but also to eat, sleep, connect, play and have fun. Their views suggest that good transport considers the social and emotional dimensions of mobility.
2. **Integrate arts-based participatory methods into transport planning.** These approaches allow participants to creatively engage in an accessible and affordable way.
3. **Include children as stakeholders in transport consultations.** Children have opinions and perspectives on how they travel, and their voices deserve to be included.

We also recommend that researchers studying this topic and/or working with children:

1. **Consider using 'fun' research methods,** as they can encourage participation from both hard-to-reach populations and difficult-to-engage individuals. Participants also gain something from the experience, which ensures it is not extractive.
2. **Be aware of the limitations of such methods** (e.g. influence of parents/guardians, quantity of data that can be collected) and consider co-designing prompts and outlining clear guidelines for parents.

Methods

We used an arts-based approach, which uses creative techniques to help children express their ideas, experiences and views beyond what can be achieved through language alone.

We held four junk-modelling workshops where we asked 37 children (aged 4-15) to create an artifact that represents how they would like to travel in the future. We then interviewed ten children about their visions of the future of mobility and developed key themes. The materials used in this project can be found on the Open Science Framework project.



Figure 1: The core research team at the workshops in Bath Library.

Findings

1) Children envisioned transport which supported a range of needs

Children designed models that had functionality beyond simply allowing them to travel. Children often created models that were multi-functional; they wanted to be able to eat, sleep and bathe on their future modes of transport too. For example, one child described the house-like qualities of their vehicle:

> "So that's the chimney, and it's also a water tank and it goes into there, which is their bath." (Interview 9).

Another child created a multi-functional jetpack, allowing them to travel and bring food and drink with them:

> "Mummy can you open this for me?" [Mother opens compartment in jet pack.] "In here you can keep food as well and drink." (Interview 8).

2) Children envisioned transport which aligned with their values

Children made design decisions that were aligned to their values. These included wanting to experience joy, social interactions, safety, and fun through their mode of travel. For example, one child said that using their imagined mode of transport would be "fun, because you can chat to the other people on the [three-wheeled] bike" (Interview 10).

Another child imagined a transformer robot being their method of travel in the future and explained how it would provide comfort:

> INTERVIEWER: "What's your favourite thing about your model?" CHILD: "That we can hold his hand." (Interview 5).

Some children seemed to value safety, with one child incorporating an emergency stop button so that "if it's going crazy you just press that [emergency stop button] and it would stop" (Interview 6). Many children also appeared to value freedom, flexibility and autonomy. They wanted to travel "anywhere!" (Interview 2) and to destinations that are conventionally inaccessible to them:

> “it can travel into space and also fly to Australia… it can go to the sun — all the way to the sun — and higher, even to the moon… And above the clouds.” (Interview 4).

These visions of future travel indicate that even from a young age children value the experience of travel, not just the functionality.

3) There are tensions between reality and imagination, and this varies from child to child

Some children grounded their models in pre-existing travel modes, focusing on detail and realism. For example, one child designed a hybrid RAF plane (Figure 2), having realised that using electric power is more sustainable than burning fossil fuels. That said, scientific understanding varied from child to child. One child thought carefully about the energy source of their plane, including energy distribution and safety systems, yet it was powered by a sword.

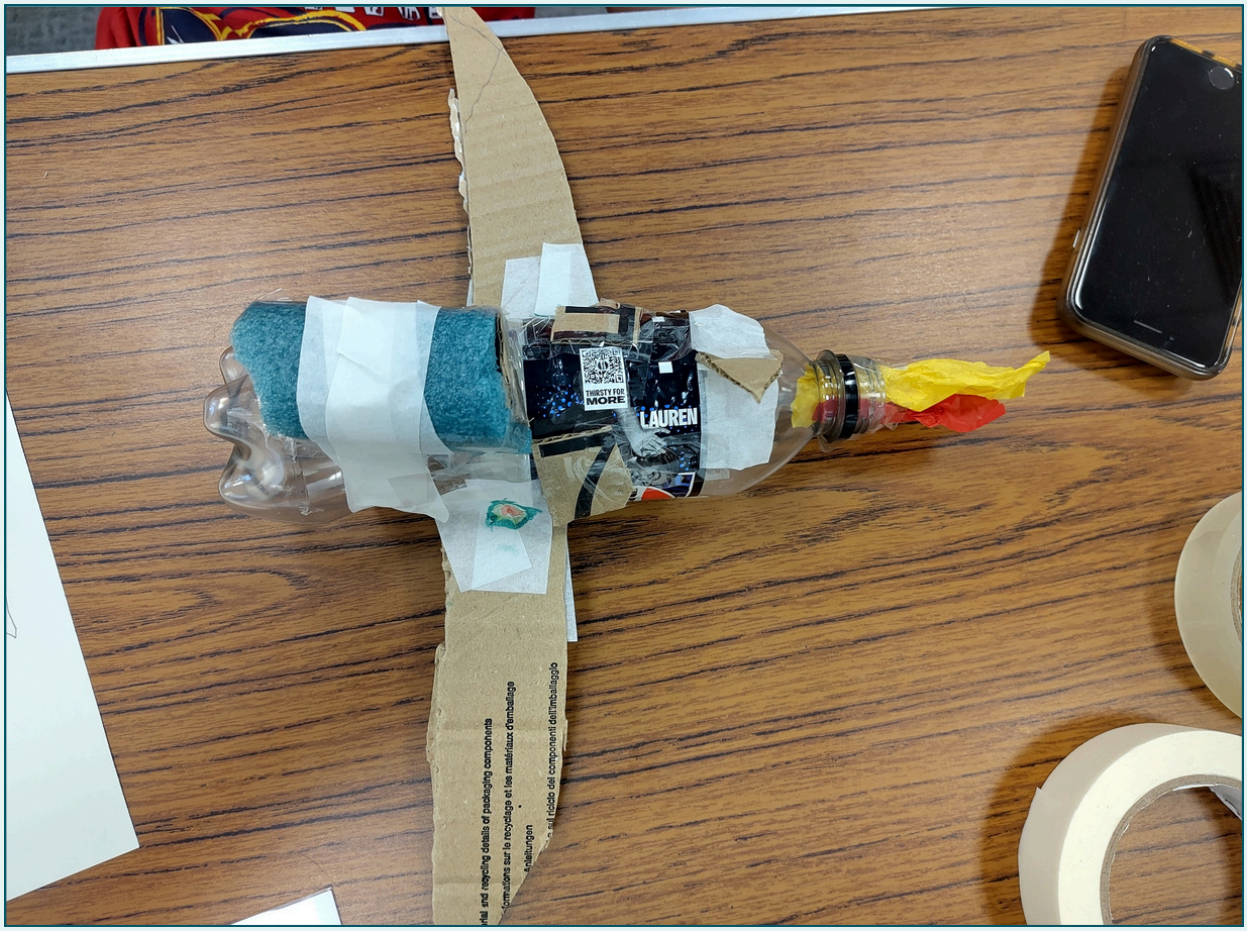


Figure 2: A junk model of a hybrid RAF spitfire.

Other children were less concerned with the limitations of reality and grounded their ideas in the realms of imagination and fiction. One child created a transformer which could change from a car into a robot, whilst another used a jewel (see Figure 3) to hail a vehicle to travel to their desired location:

> "You pick up a jewel that you want, like this one [...] If you... imagine a vehicle that you want to go in [...] then it comes up in front of you." (Interview 3)



Figure 3: A jewellery box creates different travelling abilities depending on the jewel that the user is holding, e.g. teleportation or a vehicle synthesizer.

These visions of future travel indicate that even from a young age children value the experience of travel, not just the functionality.

4) Creative research methods can provide rich data but may need careful implementation

After collecting our data, we had the opportunity to reflect on the experience of using arts-based methods in research. The approach provided rich insights into how children envision the future of transport, but it also highlighted some challenges and practical considerations. First, some children exercised their imagination to create fictionalised modes of transport without reflecting on a realistic transport future. This may relate to age; younger children may create more imaginative visions of the future, whereas older children may have a more realistic interpretation of future transport modes. Participants may also be primed by the method to be creative, and researchers should keep this in mind when analysing responses.

Additionally, the quality of interview data may be limited due to the distraction and noise interference of a 'play' setting. To combat this, researchers could conduct interviews in a separate room, aim for larger-than-necessary sample sizes, and/or consider using creative methods alongside other data.

Finally, interference can occur from parents and guardians. Consequently, we recommend giving participants' parents/guardians clear instructions that outline their role in the interview. This ensures the child's perspective is the focus of the conversation. We also recommend co-designing prompts and questions with relevant stakeholders (e.g. transport planners, policymakers, or schools) to ensure the most useful and relevant topics are covered.

Conclusion

Decarbonising the transport sector presents an opportunity not only to reduce emissions, but also to create public transport systems that help people live more fulfilling lives. The design decisions made today will affect how the generations of tomorrow live, work and travel.

The recommendations in this briefing – considering the wider functions/benefits of transport systems; consulting children at design stage; and using arts-based methods as part of these consultations – should help researchers, practitioners and policymakers ensure that the transport of tomorrow reflects the needs and desires of the people who will use them in the decades to come.



Further reading

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CRedIT Taxonomy:

- Jesse Wise: Conceptualization, Methodology, Project administration, Investigation, Writing - Original Draft
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- Ellie Smallwood: Conceptualization, Project administration, Methodology, Investigation, Writing - Original Draft
- Laura Seminati: Investigation, Methodology, Writing - Original Draft
- Hannah Pickard: Writing - Original Draft

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