

Work It Out Wombats! Family App
and Work It Out @ Your Library

Support Computational Thinking

Work It Out Wombats! has launched new resources designed to help young children explore **computational thinking (CT)**, a creative way of thinking that helps children solve problems and complete tasks in more organized ways.

Read more about how libraries and families can use these resources to support sustained engagement in CT learning.

[Click here to read the report](#)



Work It Out Wombats! Resources



Wombats! Family App

The *Wombats! Family App* is a free app that encourages families of 3- to 6-year-olds to watch and discuss videos about CT skills, and then do simple, hands-on activities that allow children to practice those skills. Once downloaded, use of the app does not require a connection to the internet.



[FIND THE APP HERE](#)



Work It Out @ Your Library

Work It Out @ Your Library is a set of free resources for librarians to host in-person programming that engages families of 3- to 6-year-olds in CT learning at the library and at home. Using *Wombats!* media, librarians host weekly 1-hour sessions that provide families with strategies for supporting learning and opportunities to practice CT in a community context.



[FIND THE RESOURCES HERE](#)



Both resources use animated videos from *Work It Out Wombats!*, a PBS KIDS series for 3- to 6-year-olds that features Malik, Zadie, and Zeke, three energetic wombat siblings who live with their grandmother in the fantastical “Treeborhood” apartment complex. Through their many adventures, the Wombats solve problems, accomplish tasks, and express their creative talents—while using the CT skills that are at the core of computer science.



Our Research

Education Development Center (EDC) conducted a pre-post impact study to understand how libraries and families can use these resources to support sustained engagement in CT learning.

The study included 141 families of 4- and 5-year-old children and 17 libraries in rural, under-resourced communities across the country. Families were divided into two groups: 80 families participated in the *Work It Out @ Your Library* program and used the app at home for 5 weeks; 61 families used the app at home without library support. Librarians and caregivers shared their experiences through surveys and interviews.



[Click here for more information about this study.](#)

What did we find?

The *Wombats! Family App* helped families learn CT together and stay engaged!

- ✓ Across the full sample, caregivers reported that they **completed a high number of *Wombats!* activities.**
- ✓ The strongest motivator for families to stay engaged was **children's enjoyment of the app.**
- ✓ After using the app, caregivers showed **significant positive changes** in their understanding of CT, their self-efficacy in engaging their child in CT, and their use of parenting strategies that support CT.
- ✓ Caregivers reported that their children showed a **significant increase** in their CT mindsets as they approached problems, including persistence and flexible thinking.

Work It Out @ Your Library provided everything librarians needed to implement a high-quality, cost-effective program.

- ✓ The ready-made curriculum allowed librarians to run sessions with **minimal preparation** while also tailoring the program for their unique families.
- ✓ After implementing the program, librarians showed a **significant increase** in their self-efficacy in supporting families' CT exploration.

Families' participation in the *Work It Out @ Your Library* program deepened their CT learning and nurtured a valuable sense of community.

- ✓ Librarians were able to create a welcoming space that helped to keep families engaged. Families who attended the library program **completed significantly more activities** compared to those who did not have library support; caregivers explained that the in-person sessions **provided helpful motivation to keep learning at home.**
- ✓ Caregivers in the library program reported **significantly greater changes** in use of parenting strategies that support CT compared to those who did not have library support, including having conversations about the videos they watched and giving children agency in their problem solving.
- ✓ Some families who had not been regular users of the library shared that they **started to utilize other library resources** more as a result of participating in this program.

Why is this work important?

In an age of ever-growing concern over the harms of excessive screen time and social isolation, *Wombats!* resources provide a **valuable example** of the potential of digital media and mobile technology to support **off-screen learning, sustained intergenerational play, and community connection** for families of young children.

Both librarians and caregivers agreed that the quality of this experience came from the **synergy of multiple components: engaging characters and storylines** that introduced concepts of CT, an **app-based format** that provided convenient delivery of instructions and tips to practice CT skills through play, and an **in-person program** that provided community support and motivation for caregivers and children to stay engaged.



Download the *Work It Out Wombats!* Family App



Access the *Work It Out @ Your Library* resources



Read more about this research

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