Partner Passthrough Data Collection

What is Passthrough?

Passthrough is a VR feature that uses the headset's external cameras to let students see the real world around them while still wearing the device. It overlays a live video feed of the physical environment into the headset view, creating a mixed-reality experience. This allows students to remain grounded in their surroundings for safety, communication, or collaboration—without needing to remove the headset.

Some Rayner Digital Labs applications are designed to use full passthrough, allowing students to interact directly with the real world through the headset using mixed reality. This is ideal for activities that require real-world interaction, movement, or object recognition.

Other applications are designed as fully immersive VR experiences, but still take advantage of the Passthrough as a window feature. This allows students to temporarily open a view of the real world by pressing the TALK button on the left controller. Whether it's to communicate answers with a partner, listen to teacher instructions, or engage in a group task, this feature ensures students stay connected to their physical environment—enhancing safety, collaboration, and classroom flow.

How to use the Passthrough Window

This is activated by holding the TALK button on the left controller, which opens a window to the physical environment and mutes all audio in the experience. The TALK function is particularly helpful during moments when the teacher is giving instructions, managing safety, or guiding peer collaboration.

This feature becomes especially valuable during collaborative learning activities. In this mode, each VR student works with a partner who holds the corresponding worksheet based on the VR app's selected question level. For example, if the VR application is set to Higher-Level questioning, the partner should be using the Higher-Level task sheet. These printed sheets contain the same questions the VR student sees inside the headset, enabling the partner to record responses as they are verbally communicated.

To support this method, the Data Method Settings can be set to Passthrough. When this mode is enabled:

- The VR keyboard and in-headset email input are disabled

- Students are prompted to use their partner for capturing responses

- In-app reminders reinforce the importance of teamwork and help ensure data is recorded clearly and accurately
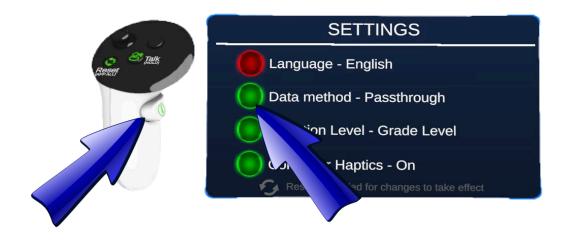
This approach not only encourages collaborative learning but also adds flexibility to how student responses are captured, allowing VR learning to blend seamlessly into classroom routines while promoting engagement and active participation.

How to set the Passthrough Data Method

By default, every Rayner Digital Labs application is set to Passthrough as the data collection method. However, if the setting has been changed to Email and you wish to return to the Passthrough mode, you can do so easily:

- Open the Settings menu by holding the Settings button on the left controller.

- Navigate through the menu using the Next arrow until you reach the Data Method option.

- Tap the green button next to the Data Method until it displays "Passthrough".

Once set to Passthrough, the application will adjust accordingly. The in-headset keyboard and email prompt will be disabled, and students will instead be guided to communicate their answers verbally to a partner, who records the responses on the corresponding printed worksheet. This method encourages peer collaboration, supports classroom interaction, and integrates seamlessly with shared learning activities.

The Power of Collaborative Learning

Partner-based data collection in VR doesn't just support practical classroom workflows—it actively enhances learning. When students work together to record answers, they build important communication, listening, and teamwork skills. Verbalising their thinking helps clarify understanding, while the act of explaining concepts aloud often deepens comprehension. For the recording partner, transcribing responses reinforces their own learning and allows both students to engage with the content from different perspectives. This collaborative approach fosters peer support, encourages accountability, and creates a more inclusive learning environment where students learn with—and from—each other. It transforms data collection into a meaningful, shared learning experience that strengthens both academic and social outcomes.