Not Everything Happens on a Screen

Hybrid activities with and without a tablet

Figure 1. The child can start with an object; the Instructor provides support and arranges the conditions.

A child places a ring, explores a texture, or carries an object to another person. The child may then look at an image, make a selection, or continue without a screen. The interesting part is not switching devices: it is **connecting what happens in each phase** and knowing what we can conclude from it.

A proposal for expanding opportunities for interaction and using technology to record, measure, and adjust activities.

Illustrated edition · September 6, 2026. AI-generated conceptual illustrations. They do not depict participants, product screenshots, or experimental results.

Two complementary contributions

Expanding opportunities for interaction and retaining information to study and adjust activities.

The child: different opportunities for interaction

Tablets and other screens can be very useful tools for learning, communication, and organizing activities, but **they are not the whole environment with which a child interacts**. On a conventional screen, images are two-dimensional and share a contact surface that does not reproduce the physical properties of the objects represented. Seeing a sponge or touching its image does not let the child feel its texture, hold its weight, or experience its resistance when squeezed. Hybrid activities combine the possibilities of a screen with other forms of interaction: exploring materials, moving the body, and acting with other people [10, 13, 27].

Instructor and researcher: records, memory, and measurement

The app's value is not limited to presenting content, either. For the Instructor and researcher, it is a **tool for recording, retaining information, and measuring**: it stores information about activities, makes past records available, and helps them examine changes in the child's performance. It also makes it easier to change what is presented - images, sounds, or instructions - and organize the next activity according to predefined criteria and recorded responses. **The Instructor or researcher sets those criteria**; the software can carry out the configured adjustments without requiring manual intervention at every step.

This contribution remains relevant when the child acts away from the screen: the activity can involve objects and other people while the app helps document it and guide what follows.

One screen, many kinds of content. Beyond it, other kinds of contact.

A photograph of a texture does not offer the object's resistance or surface.

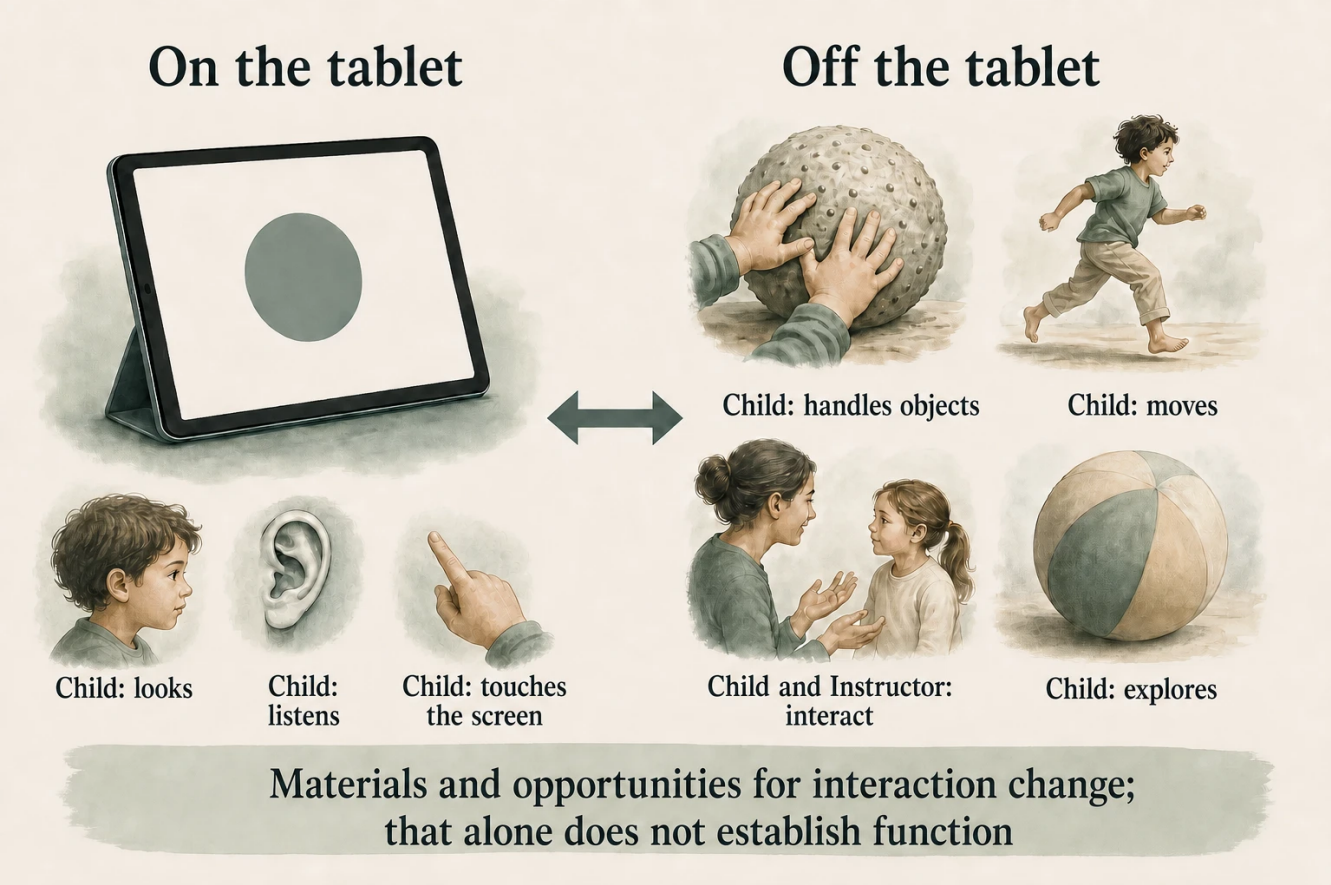

Figure 2. The child acts in both environments; the Instructor arranges the conditions of the activity.

On the tablet, the child looks at images and words, listens to sounds, or touches and drags items. The Instructor selects the content and configures its presentation. Many responses share a surface, but that **does not make the interactions equivalent** or remove the body from the situation.

Away from the tablet, the child can hold, push, carry, vocalize, or explore a surface. The Instructor offers materials and takes part in routines. Posture, distance, another person's presence, and the consequences of the child's actions also matter.

The opportunity is to expand the situations we can study. Measuring them requires defining what is recorded and how; moving off-screen does not automatically make everything measurable.

Design the whole episode

The unit of work can be a sequence, not an isolated screen.

Figure 3. Every action has an actor. The arrows show order, not function or demonstrated causation.

The child moves a block; the Instructor records that action on the tablet and presents an instruction; the child selects on the screen, and the software captures the response. The Instructor then presents another material. **People act; the tablet is a tool.**

In each phase, we distinguish **actor, action, and medium**. The Instructor can configure the digital presentation in advance: automatic execution does not require manual intervention at every step. Log_obs and Log_tab identify where a record comes from, not additional actors.

We do not add "observation" as a mandatory step. If observation is part of the activity, we identify who observes: Instructor: demonstrates → Child: watches the demonstration. A technical log showing that an audio clip played is not a substitute for a child's response.

Two sources. The same tablet.

Log_obs is also entered on the tablet. The difference is who supplies the data and how it is recorded.

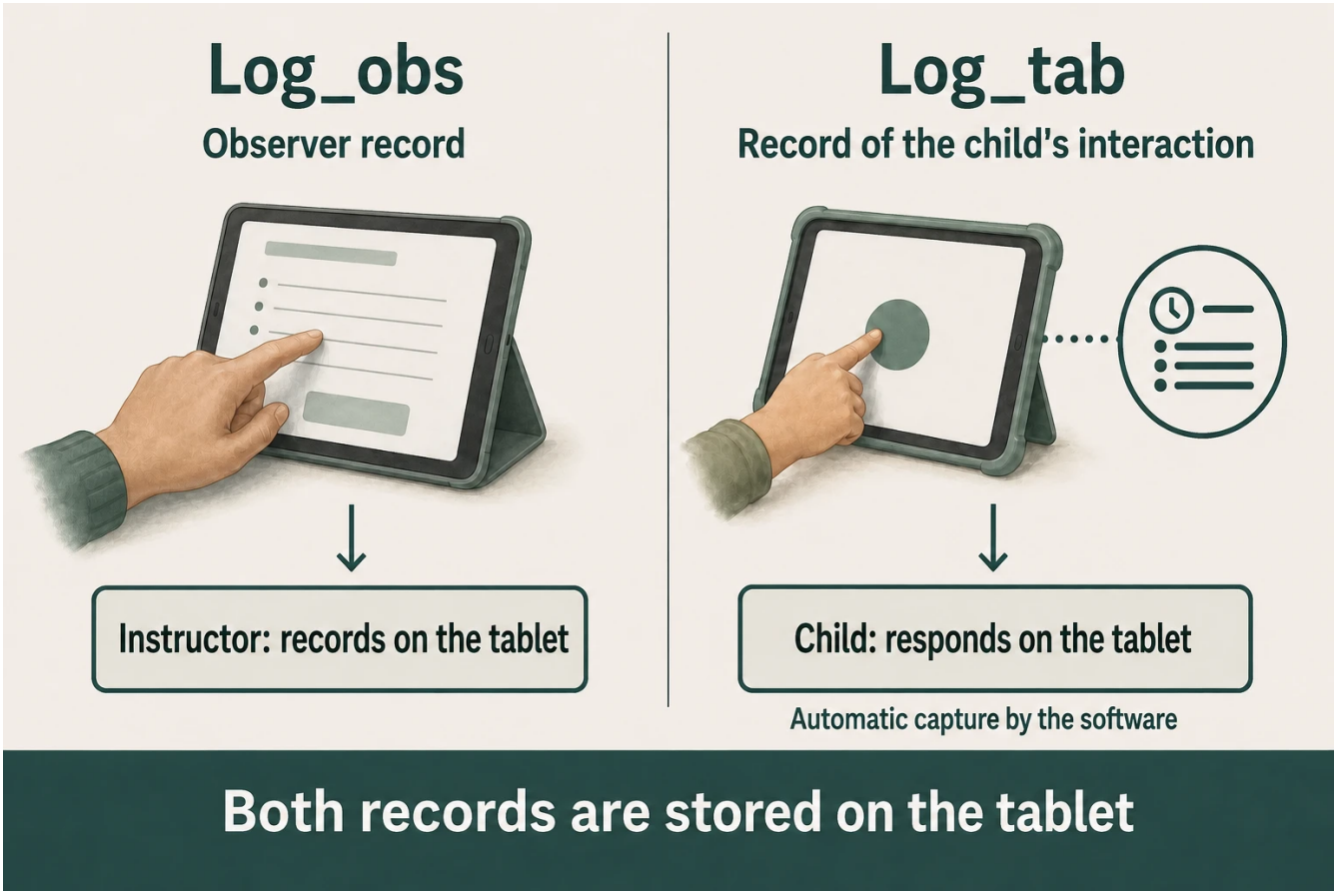

Figure 4. Both records are stored on the tablet; their sources and methods of capture differ.

Log_obs: the Instructor records what was observed on the tablet. **Log_tab:** the child responds on the tablet and the software captures that interaction. The child does not need to perform a second action to record the response.

In English, we use **Log_obs** and **Log_tab**; in Spanish, **Reg_obs** and **Reg_tab**. These are conventions used in this article, not standardized abbreviations from the literature. In both languages, the actors are named separately: Child / Niño and Instructor / Instructor.

The Instructor can record an action the child performs on or off the screen. The medium for Log_obs is still the tablet. Two sources can document the same action; they do not have to alternate or produce a combined score.

A tap does not tell the whole story

Data, evaluation, and interpretation answer different questions.

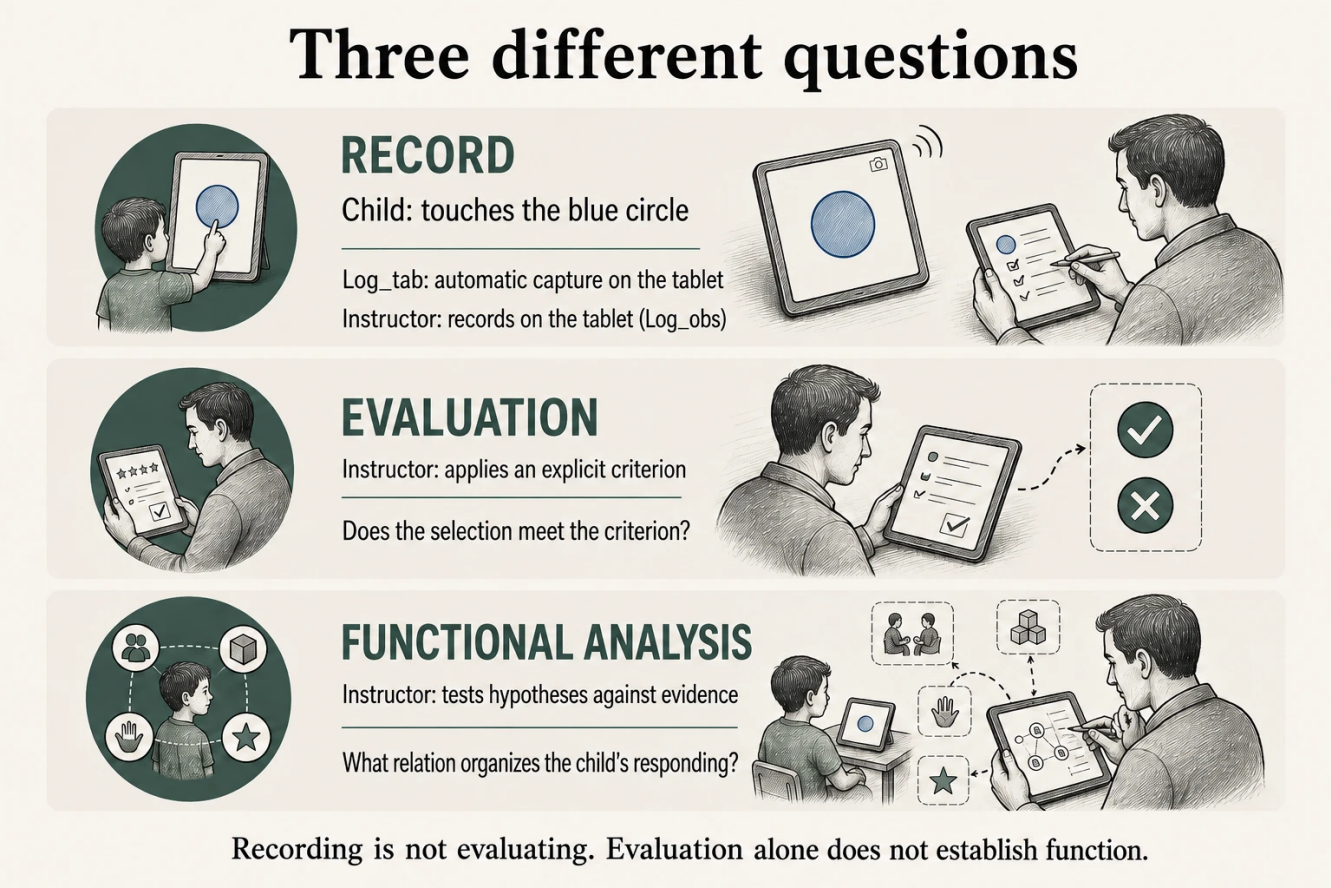

Figure 5. The child responds; the Instructor evaluates against criteria and checks interpretations against evidence.

"The child touched the blue circle" describes a data point. The Instructor can evaluate whether it meets the instruction: choosing a circle is not the same requirement as choosing red. That selection alone **does not identify which property organized the child's response** [28, 29].

Log_tab accurately preserving what the child did does not turn the response into a correct answer. Recording fidelity and meeting the criterion are different questions. In Log_obs, the Instructor distinguishes description from evaluation: writing only "incorrect" does not describe the specific action.

In the technical terminology, SF means stimulus function and RF means response function (FE and FR in Spanish). These are not scores or labels that can be inferred from a single trial. "Function not established" is a valid conclusion [28, 29].

The child does not always start on the tablet

The child takes the step; the Instructor arranges the conditions. The device is not the actor.

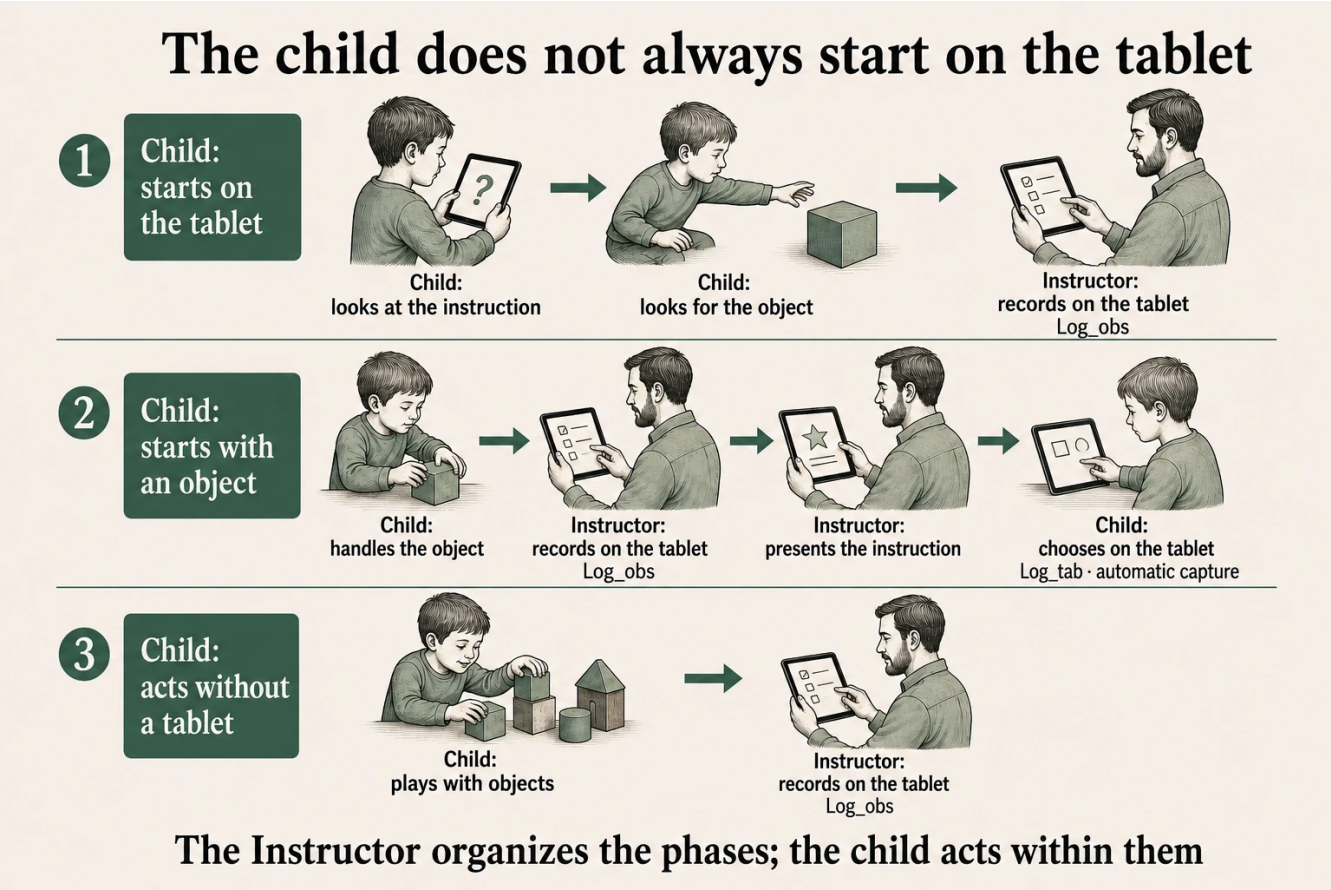

Figure 6. Three routes defined by where the child starts and acts. In each route, the Instructor enters Log_obs on the tablet.

The child starts on the tablet. The Instructor prepares the instruction; the child looks at it and finds the real object. The Instructor records on the tablet. Looking at an image does not require the child to touch the screen.

The child starts with an object. The child handles it; the Instructor records and presents a digital instruction; the child selects. **The child acts without a tablet.** The child plays with objects or people; the Instructor uses the tablet to record.

"Hybrid" does not specify an amount of screen time. It describes how the Instructor organizes phases in which the child acts through different media. The Instructor's record remains digital even when the child does not use the tablet.

The child touches first. Then chooses an image.

A real texture and its image offer different opportunities for interaction.

Figure 7. The child explores; the Instructor offers the materials. This action does not yet demonstrate tactile discrimination.

The Instructor offers a soft cube and a smooth block. The child can explore them before looking at images. The Instructor records the action defined by the protocol on the tablet, then presents a digital choice; the child selects an image.

But the child might choose by **color, shape, position, or familiarity**, not necessarily by texture. To study tactile contact, the Instructor must prepare comparisons that distinguish these alternatives. The presence of a material does not demonstrate which property was relevant.

Retaining both phases lets us ask what happened with the object and what happened when its image was presented. We should not merge them into a single percentage or treat this design example as a validated procedure.

Does learning appear in another situation?

A transfer test is a question, not a result assumed in advance.

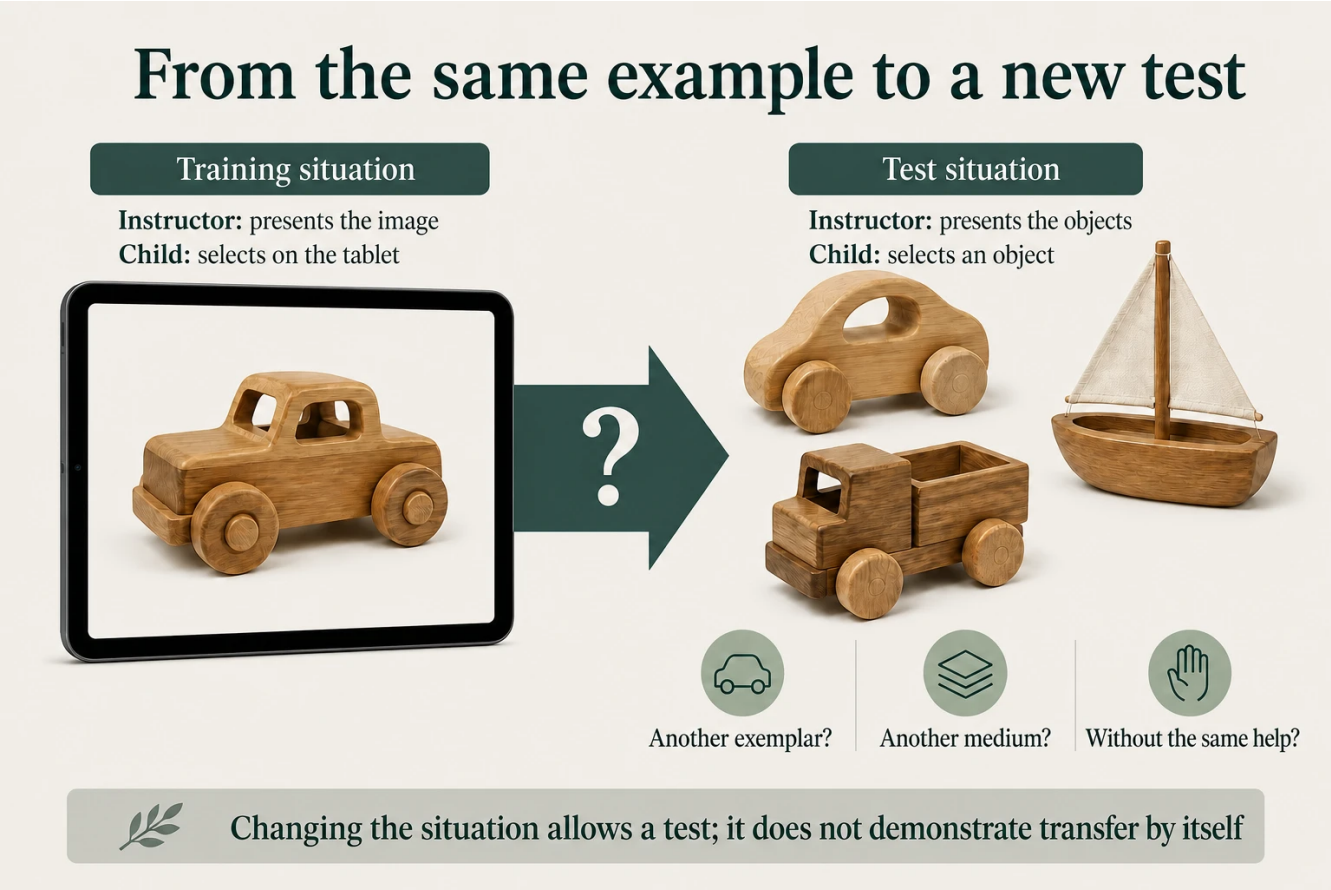

Figure 8. The Instructor changes the conditions and evaluates how the child responds, without assuming the outcome.

A child choosing an image on the tablet does not guarantee that the child will choose the corresponding object. Handling an object does not guarantee responding to its photograph, either. Studies of 2D↔3D transfer show that **the task, age, and conditions matter** [9, 10, 13, 20, 22, 23].

The Instructor states what stays the same and what changes: exemplars, medium, instructions, help, place, or person. The Instructor then records how the child responds. Interpretation must stay within the limits of that comparison.

"A test designed to evaluate transfer" describes the procedure. "Transfer demonstrated" requires evidence. An arrow between a screen and an object cannot replace that distinction.

Varela: relation is not position

The Instructor sets the criterion; the child selects according to the required relation.

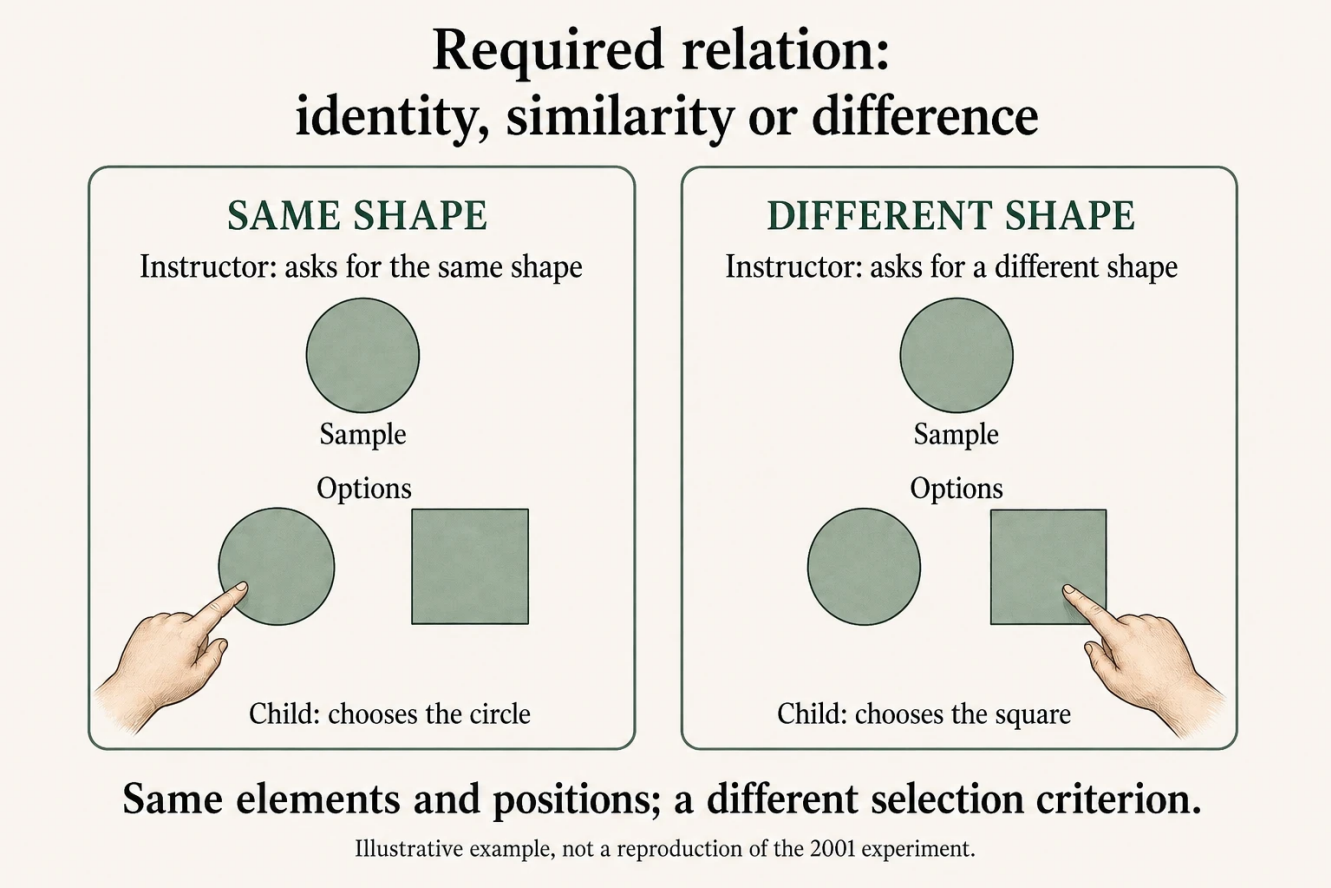

Figure 9. The Instructor changes the required criterion; the child selects from the same options. An illustrative example, not a reproduction of the 2001 study.

In Varela and Quintana, **relation** names the required criterion linking the elements: **identity, similarity or difference**. Meeting that criterion depends on the dimension being considered [26, pp. 49-51]. Identity can concern category, not just appearance. Rearranging objects is not enough to illustrate a change in relation.

In the 2001 study, the extrarelational comparison differed from the graphic example: training required **category similarity**, treating animals and plants as living things; the test required **category identity**, according to whether the items were animals, objects, or plants [21, p. 374].

The Instructor must also specify what stays the same and what changes in instances, modalities, and dimensions. "Modality" does not automatically mean sensory channel; moving from a tablet to a real object does not, by itself, classify the transfer.

The cited study involved participants aged 9-11 and 16-20. Here, it helps specify comparisons; it is not direct evidence that hybrid activities are effective for children aged 18-36 months.

From a fixed chain to an adaptive activity

Recording and adapting are not the same operation.

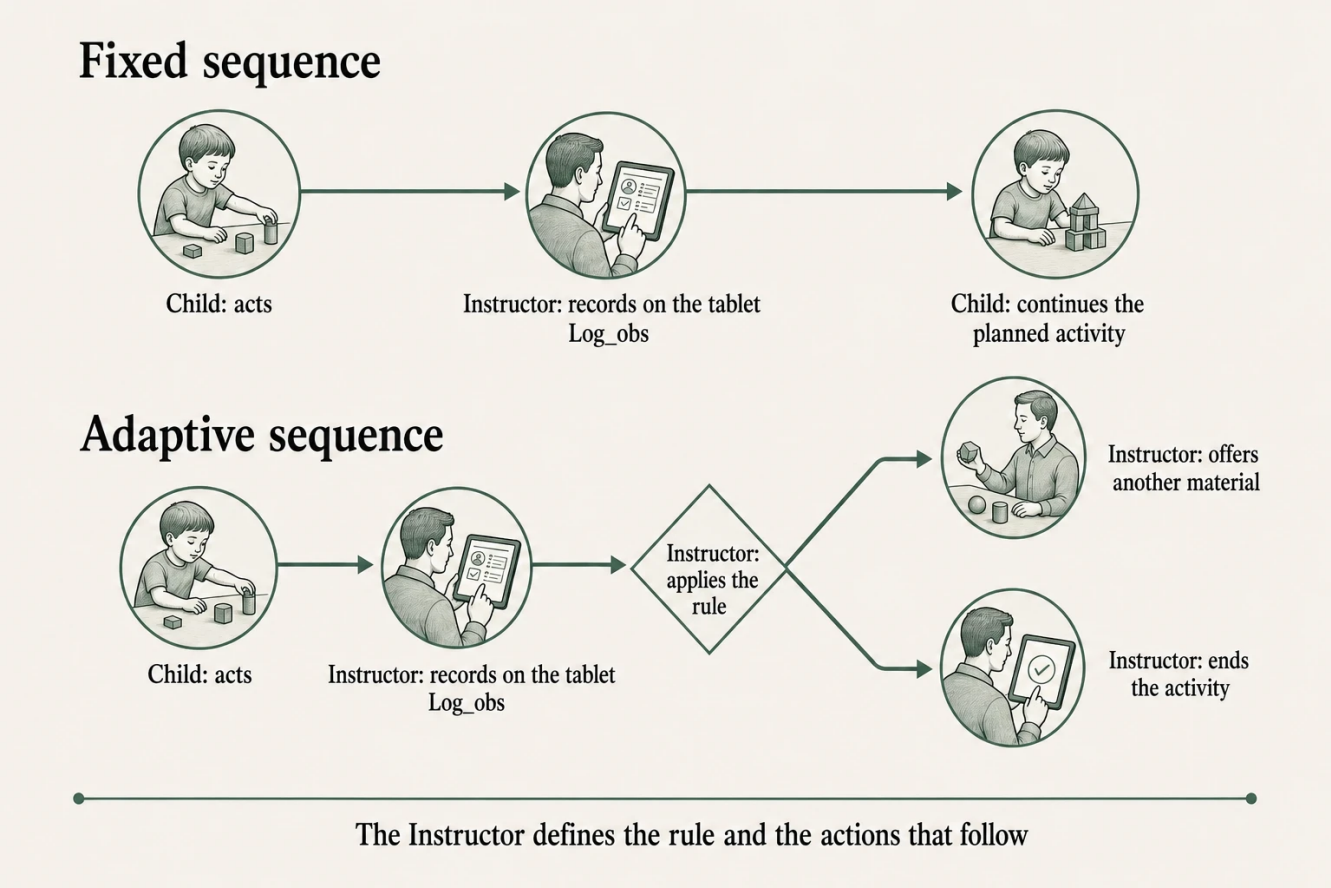

Figure 10. The Instructor defines the rule and, in this example, applies it to adjust the next phase.

In a fixed sequence, the Instructor keeps the next planned phase even while recording what happened. In an adaptive sequence, the Instructor uses relevant data and applies an explicit rule to adjust what is offered to the child.

For example, the Instructor offers another material after recording that the child declined the first, or ends the activity when the planned time is reached. The Instructor can also configure the software to execute a rule automatically. **Neither that automation nor the adjustment demonstrates learning or identifies a function.**

To describe the feedback loop, ask: who defines the rule, which data does it use, and what changes afterward? These are design possibilities, not a promise of effectiveness or a claim that all of them are implemented in Interlaza.

What Interlaza can do

The child can act with materials while the Instructor maintains the record in the app.

In tablet mode, the child responds and the software captures the interaction. In Record mode, the Instructor enters what happened. Interlaza retains the source of the session data and provides access to past records without treating the two sources as the same measure.

The Instructor can organize activities with a screen, printed cards, or objects; record responses; and distinguish no response, refusal, and interruption. Counts and durations retain their own measures: they are not converted into a percentage of correct answers.

The phases of some hybrid episodes can be linked so their results can be viewed side by side. That link does not mean they occurred in one continuous session, and it does not demonstrate transfer by itself.

The app also executes adjustments specified by its configuration, for example in difficulty or progression. That does not mean it supports every rule we can imagine. Changing materials after a refusal may be the Instructor's decision, without a dedicated automation.

Capabilities checked against Interlaza's code on September 6, 2026. Availability depends on mode and plan. Recording helps us study the activity; it does not replace a definition of the behavior, a measurement protocol, or the researcher's judgment.

A zero can say a lot. An empty field says something else.

Without knowing the opportunity to respond, a data point loses part of its meaning.

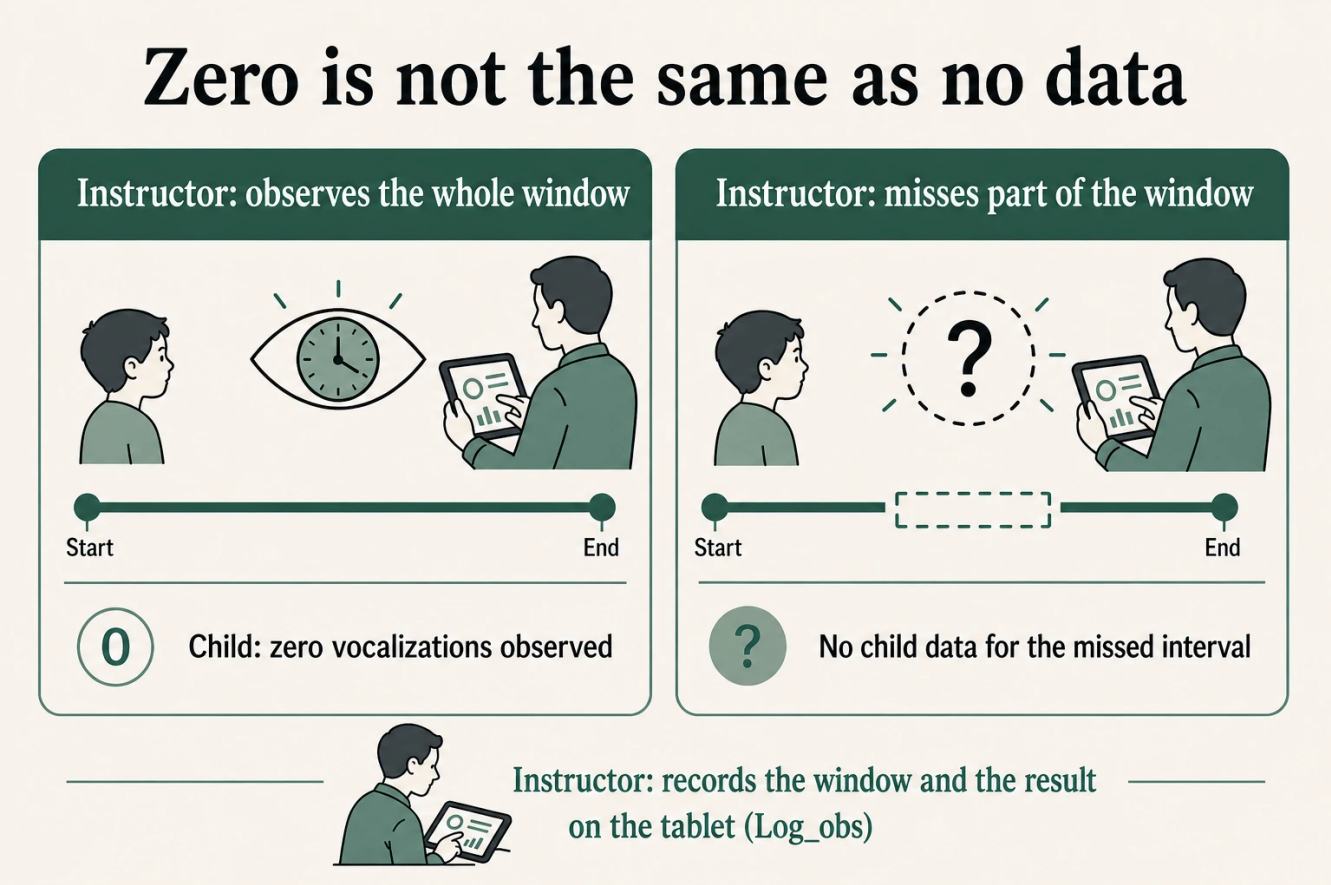

Figure 11. The Instructor records both the result and the observation window on the tablet.

An Instructor who writes "The child made 0 vocalizations during 2 observed minutes" documents a zero within a defined window. If the Instructor leaves the field empty or misses part of the window, we cannot assign zero responses to the child during that interval.

The Instructor chooses what to measure according to the question: selection, frequency, duration, or latency. To calculate a rate, the Instructor defines the time actually observed; for a duration, the start and end. The Instructor distinguishes **the child did not respond, the Instructor did not observe, and a recording problem**.

When the Instructor records by tapping, the recorded time may include the Instructor's recording delay; it should not automatically be interpreted as the child's latency. Automatic capture also requires integrity checks.

The child must also be able to say no

A wide range of possibilities needs clear limits and an accessible way to stop.

Figure 12. The child can decline, pause, or stop; the Instructor responds to that choice.

More materials and modalities do not automatically make an experience better. The Instructor prepares suitable materials and attends to the child's comfort. If the child requests a pause or declines a material, the Instructor records it as such on the tablet, **without automatically treating it as an error**.

Particular care is needed with bodily states: a choice may communicate a preference or need, but it does not, by itself, measure supposedly correct interoceptive awareness. The cited research reports heterogeneous findings and generally studies older age groups [14, 15, 17].

The Instructor can present the tablet, wait, record on it, or put it aside. The child can look, respond, explore, or decline. People act; objects and devices are part of the conditions of that interaction.

Broad possibilities. Bounded conclusions.

The literature informs design; it does not automatically validate every new combination.

The device is not a universal ingredient

Allen, Hartley, and Cain found no general advantage of the iPad over the book in their study of 16 minimally verbal autistic children. Multiple exemplars supported the extension of labels from images to objects [1]. The useful question is not only "with a tablet?" but "with which examples, and for which relation?"

Adult interaction matters, but not in just any form

Studies of adult support and learning from screens justify attention to the quality of the interaction [8, 24, 25]. In Heimann and colleagues' study, adult support improved recall compared with passive viewing. However, increasing instructions for the adult to talk more did not add a recall advantage over spontaneous support [8].

More interactivity does not guarantee more learning

The effects of tapping, dragging, or watching vary across tasks and participants [4, 16, 18]. Some studies show transfer between digital and physical versions; others find difficulties. That is not a contradiction to resolve in favor of a device, but a reason to specify the conditions [9, 13].

The usefulness of the two records needs to be evaluated

The Instructor can analyze Log_obs and Log_tab together while retaining who acted and where each data point came from. Whether that arrangement improves learning, interpretation, or transfer in children aged 18-36 months **remains a hypothesis**, not a result demonstrated merely by the existence of two records.

The promise of hybrid activities is not to put the whole world on a screen. It is to connect episodes that can be described, studied, and adjusted without confusing possibilities with results.

Scope of the evidence. This article is an illustrated conceptual proposal, not a systematic review or a study of Interlaza's effectiveness. The cited research uses different tasks, ages, and populations; its findings do not automatically validate a new activity.

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The numbers identify the sources used in the text and retain the numbering of the original edition. Further reading is listed separately.

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Visual credits. Twelve AI-generated conceptual illustrations. They do not depict participants, Interlaza screenshots, or experimental results.