

Tracking Your Impact: Participants & Educational Opportunities

Introduction

One quantitative measure of documenting the success of Living Lab collaborations is looking at the number of visitors who learn about the scientific method and/or child development as a science. This educational experience can happen by participating (or observing their child participate) in a research study or through any other face-to-face conversations with the scientist conducting that study. Visitors who interact with a researcher in a Living Lab experience can be divided into two groups: Participants and Educational Opportunities.

Note: While it is helpful to record Participants and Educational Opportunities separately, **Living Lab is** an educational program in which all visitors have the same overall experience with and access to research, regardless of whether they will be included as data points in the study.

Who is a Participant?

Although scientists in the Living Lab educate all interested visitors about their work, only some visitors are eligible to contribute to the actual dataset for a scientist's study (the information that scientists hope to publish in an academic journal, or present at a conference). Children might not be eligible to be included in this dataset because a) they are outside of the age range or demographic group that the researcher is studying, b) the researcher does not have permission to record information about the child, c) the child does not finish the whole study. This does not mean that visitors cannot try out the study, or that they shouldn't speak with scientists; it simply means that the scientist doesn't use information about these visitors in reports about their studies.

A Participant is any visitor that: 1) meets the criteria that the scientist has set for their research study; and 2) whose parent or legal guardian consents to being part of a research study in the museum, meaning that they agree to allow the researcher to record and analyze information about their child to answer a research question.

A visitor is counted as a Participant if they meet all of the following criteria:

- they have a parent or legal guardian present who agrees to sign a consent form indicating they
 agree that information about their child can be recorded by the scientists
- the child's age falls within the range that the scientist aims to study
- the child finishes the study (does not "fuss out")

When a scientist marks down that they have successfully recruited and run a Participant, it indicates that a child took part in the study and that the scientist can use their data to further their research. However, it also indicates that the adult parent or legal guardian of that child who signed the consent form also learned about the study by observing their child participate and via conversation with the scientist as part of the Living Lab research process.

** Every Participant documented includes an adult educational experience**

1 Participant = 1 child who completes the study + 1 parent who learns of the research

The adult who signs the consent form should not also be counted as an Educational Opportunity (Ed Op). However, any additional adults who learn about the research should be counted as an Ed Op (see *Who is an Educational Opportunity* below).

An adult consenting to their child's participating in a study may be educated during any or all of the following:

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	The recruiting phase ("Hi, my name is Jen from Boston University and I'm running a study
	looking at how children develop critical thinking skills. Come on over and I can tell you and
	your child some more about it")
	The debriefing phase ("So now that we've completed the study, what did you observe your
	child do? Let me tell you specifically what we are looking for and how we measure that")
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☐ **Throughout** the study depending on the specific study design (i.e. if there are two research assistants, one who is running the child and one who is actively talking to the legal guardian about the child's participation in the study).

Who is an Educational Opportunity (Ed Op)?

In an Educational Opportunity (Ed Op), scientists do not record or use the information about a child for their research. This includes any situation when visitors speak with the scientist or see their study without having their information recorded or analyzed by the scientist. Because these visitors are not research "Participants" in the formal sense, but nevertheless interact with the scientist in the museum and learn from the experience, we keep track of these visitors in a separate category to track the program's educational impact.

An Educational Opportunity is any visitor who: 1) is educated about a current research study, the scientific method or the field of child development at large through a conversation with a scientist in a museum; and 2) does not meet "Participant" eligibility requirements (above).

Visitors considered Educational Opportunities can be of any age as long as they are gaining an understanding of the scientific method or child development as a science. In many cases, the adult caregiver accompanying a child ineligible to be a "Participant", but who engages with the study materials will learn about child development or the scientific method and will be counted as an Ed Op. Very young children will enjoy interacting with the study materials or with the researcher, but should not be counted as an Ed Op unless they learn about the science of child development or the scientific method. Educational opportunities can also come in the form of groups, which could vary in size from one person to a sizeable school group. It is also important to note that Ed Ops can take place anywhere in the exhibit, not just where Living Lab research is being conducted.

There are many situations within a dynamic museum environment that allow visitors to learn about a research study through an interaction with a scientist, even though that visitor may not be eligible or able to actually participate in the study. The following are example scenarios of visitors that could be counted as EdOps:

- 1. Adults with children that do not meet the study criteria (i.e. not in study age range, could either be too young or too old).
- 2. Adults or older children in school groups/camp groups/friend groups.
- 3. Siblings in a family group (e.g. older siblings, outside of the study age range) where one sibling is participating in the research study
- 4. Others adults in a family group (e.g. aunts, uncles, grandparents, nannies) where one child is participating in the research study. In this case, the parent or legal guardian who signed the consent form would be counted in the "Participant" data but all other adults would be counted as Educational Opportunities.
- 5. Other adult visitors, not with a child, who are interested in the Living Laboratory or research generally (e.g. teachers, museum educators, museum visitors without children)
- 6. Adults and their children who are told about the study and/or the field of child development during the recruitment process, but chose not to participate.

Although a parent or legal guardian is required for a child to be counted as a Participant, it is important to remember that for an Ed Op, the adult does not have to be the child's legal guardian (they could be another family member, nanny, babysitter etc.), because in this case the scientist does not record or use any information about the child — it is simply an informal learning experience.