Data Use Guide

Data Sources

To generate reports and dashboards using IMPACT™, you will need data that you already have from multiple sources. LearnPlatform leverages the data you have, whether entered during contract management (cost) or via reports you already receive (usage). This document explains the different sources of data that are used for different types of analyses, indicates which sources of data are used for different reports, and provides an example of how a sample dataset may look.

Usage Data

Used to Run Utilization Analysis, Cost Analysis, and IMPACT™ Analysis

Usage data include measures that quantify the extent to which a student uses an edtech tool. When possible, usage data should involve measures that capture progression, which allows the analysis to convey information about the quality of use in addition to quantity of use.

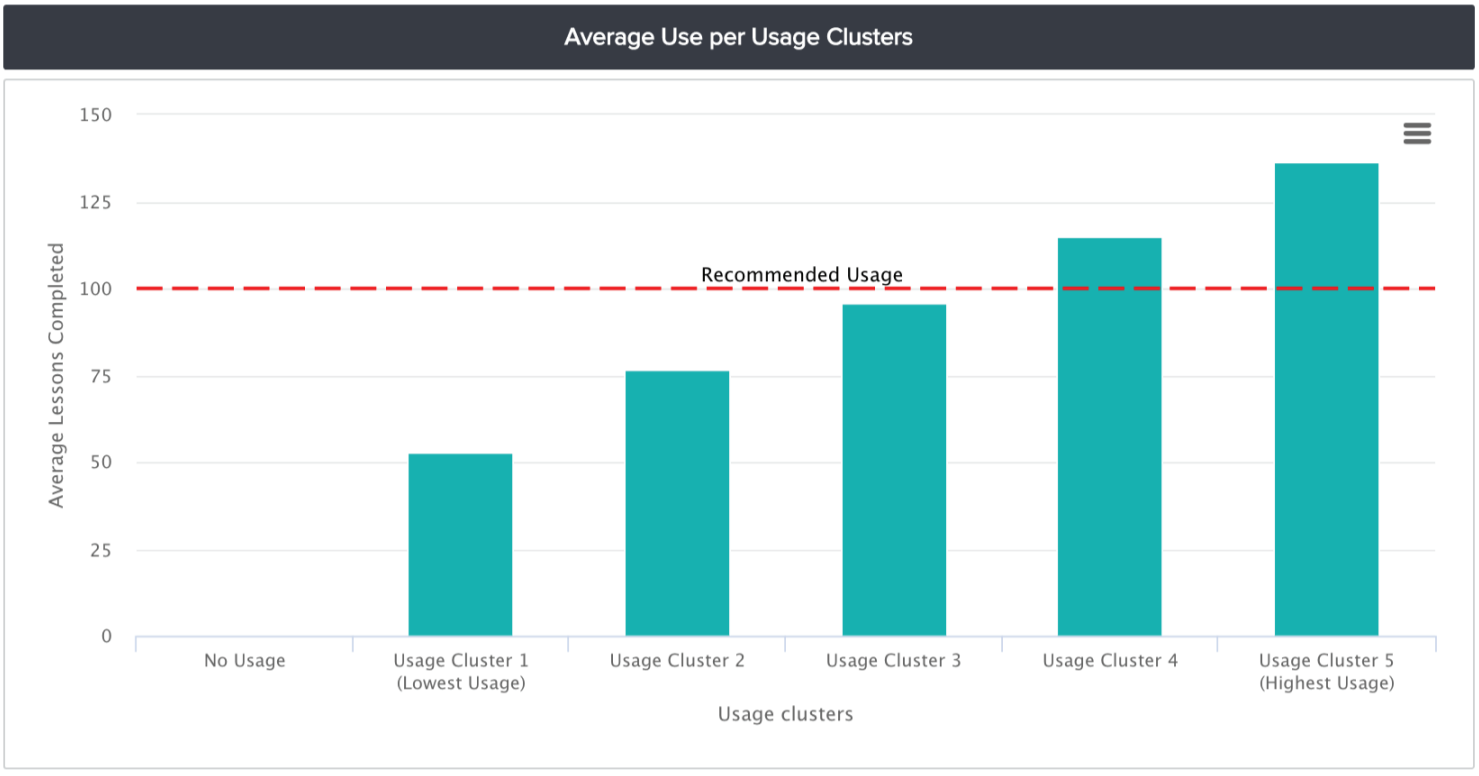
Common examples of usage metrics include:

- Units attempted
- Lessons completed
- Percentage of progress through a syllabus

Usage data that do not measure progression include:

- Time spent on the product
- Number of logins

Note: At times, schools and districts select a usage metric indicative of mastery (e.g., proficiency level achieved, percentage of problems answered correctly). It is important to note that both usage and mastery metrics can be examined, but they provide different information about the relationship between product use and efficacy.

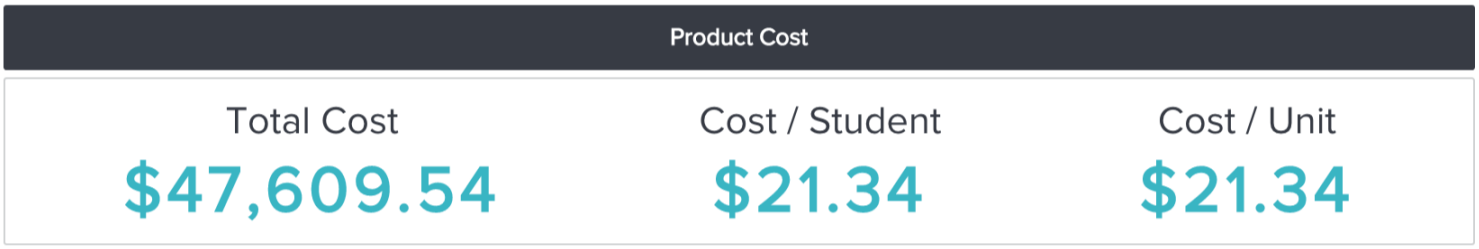


Sample utilization report, IMPACT™ Analysis 2.0

Pricing Data

Used to Run Cost Analysis

Pricing data include the cost of the edtech product subscription or license, priced per student or per site. Pricing has usually been entered in LearnPlatform during procurement and contract management, therefore is pulled from the system with no additional data entry. Pricing data may also include any direct and indirect costs associated with owning the product (e.g., professional development, staff hours). Pricing data are included in multiple analyses, including cost effectiveness analysis and total cost of ownership.



Sample pricing report, IMPACT™ Analysis 2.0

Achievement Data

Used to Run IMPACT™ Analysis

Achievement data include measures of education outcomes that the edtech product claims to improve. Conducting an IMPACT™ Analysis will allow you to examine the extent to which using the edtech product relates to growth in the outcome(s) of interest. To run an IMPACT™ Analysis, you enter usage data in addition to pre- and post-intervention achievement data. Also, student-level data is used to make inferences about product impacts on student outcomes.

- Pre-intervention achievement refers to student scores on a measurable education outcome prior to using the edtech product.
- Post-intervention achievement refers to student scores on a measurable education outcome after using the edtech product.

Note: Ideally, both scores are from the same education outcome. It's important to choose an education outcome that you expect to be influenced by the edtech product.

Covariate Data

Optional for more precise results and additional insights

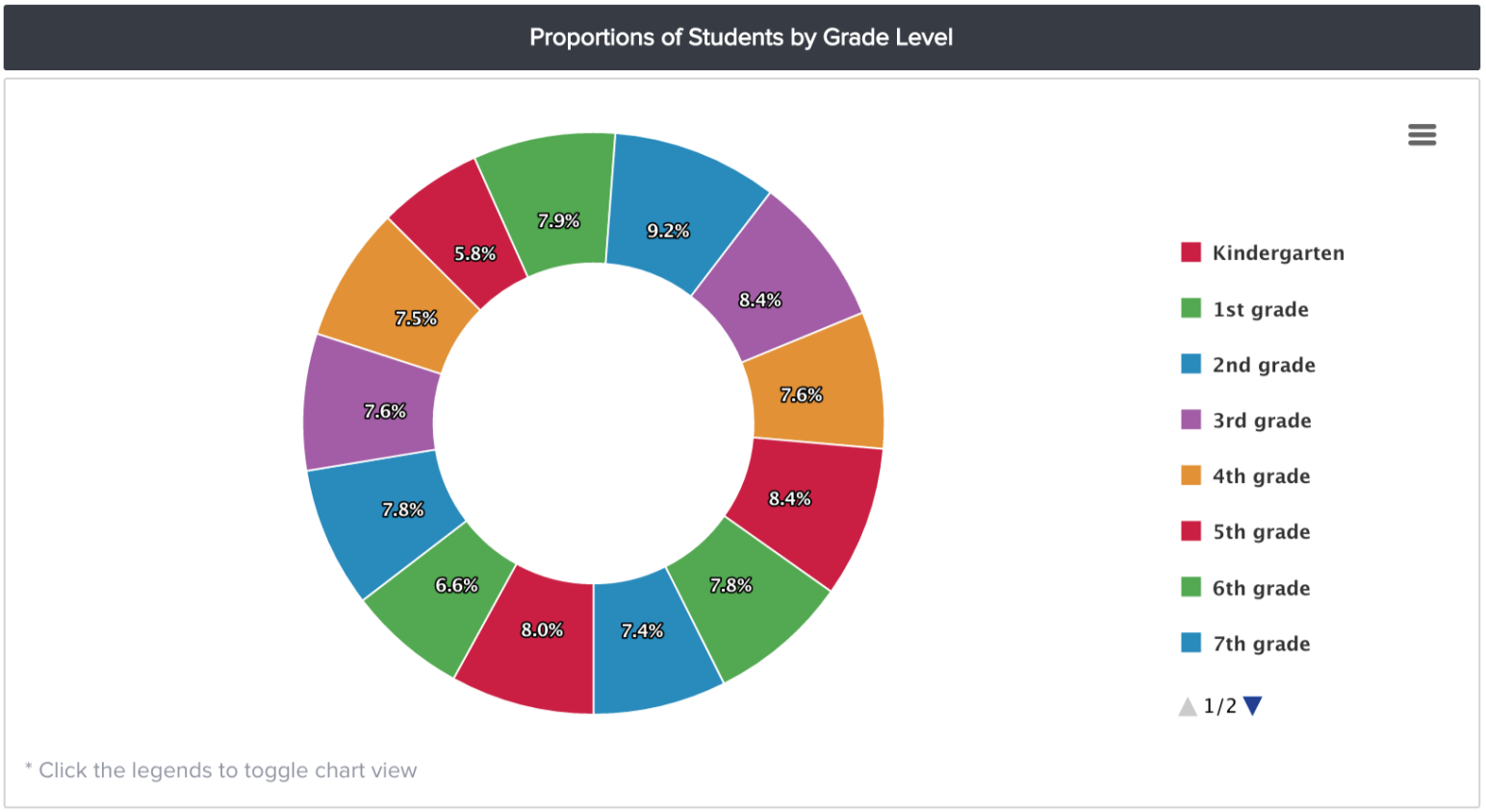
A covariate is any variable that may have an impact on the outcome of the study. Covariate data include characteristics that differ across participants (e.g., demographics, grade level) and that may have an impact on usage or impact, but that are not included in the usage data or achievement data. Covariates should be accounted for (or controlled for) in the statistical model to prevent them from confounding your results.

Example: Motivated students with high GPAs may report a high level of usage and achievement regardless of the actual effectiveness of the edtech tool. Including motivation and GPA in the model allows us to hold those variables constant so that they don't influence the results of the analysis.

Note: Covariates are not needed, but including them allows the IMPACT Analysis to reduce bias, control for extraneous factors, and produce more precise results.

Examples of covariate data:

- Demographic data
- Free/reduced lunch eligibility
- Grade level
- GPA
- Pre-intervention test scores



Sample demographic data report, IMPACT™ Analysis 2.0

Selecting Subjects to Study Groups

Optional

If your organization conducted a study in which subjects (e.g., students, schools) were selected or assigned to an intervention (e.g., assigned to use an edtech product), then you should identify the conditions in your data. Assigning conditions allows you to identify the treatment group (i.e., subjects who received the intervention) and the control (or comparison) group (i.e., subjects who did not receive the intervention). In the event that you do not assign subjects to conditions, it will be assumed that all subjects were exposed to the intervention, and we default to a correlational analysis in lieu of a treatment-versus-comparison analysis.

Preparing the Dataset

Data should be prepared in a comma-separated values (CSV) file. The first row in the spreadsheet should contain labels (or headers) that identify all variables in the dataset (e.g., Student ID, Gender, School). Each row after the first row should contain data for individual subjects (e.g., a student or a school). Thus, each column will start with the header that identifies the variable, followed by data that correspond to its respective row in the cells that follow. All cells, (except the row of headers) should contain numeric values, and should either be continuous or categorical in nature.

For instance, in the selection below, Row 1 contains the headers, Row 2 contains data on each variable for a student with a Student ID of 12345, and Row 3 contains the data on each variable for a student with a Student ID of 12346.

	A	B	C	D	E	F	G	H
1	Student ID	Fall Test Score	Spring Test Score	Grade Level	Gender	Ethnicity	Free/Reduced Lunch	School
2	12345	95	96	5	1	5	1	1
3	12346	87	93	5	0	3	0	1
4	12347	67	75	5	1	4	1	2
5	12348	75	74	5	0	5	1	2
6								

If possible, provide data at the student level (i.e., data for each student), and identify the time at which the data were collected. Data that are aggregated to the class or school level are acceptable for both the Utilization Analysis and the Cost Analysis; however, aggregated data limits the conclusions you can draw and prevents one from being able to make student-level inferences.

School-level data only allows one to compare across schools (e.g., School X used the product more than School Y), whereas student-level data would allow one to make the aforementioned comparison while also understanding insightful nuances about which students engaged more or demonstrated greater impact.