



Learn who used your technology

System data (also sometimes called usage or log data) can be a good way to find out **who** is using an educational technology and **how**. This information can shed light on why a product is or isn't having the desired effect.

WHEN AND WHY YOU SHOULD USE SYSTEM DATA

System data can be useful at several stages of your evaluation to help you answer key questions:

When you are getting started: Is the product used enough to warrant an impact analysis?

System data shows substantial usage of the product. Proceed with analysis.

Table 1

Student ID	Class ID	Total # of Sessions	Total # of Minutes	Average Minutes per Session
12345	123	10	125	12.5
12346	123	10	130	13.0
12347	123	14	245	17.5
12348	450	1	10	10.0
12349	450	2	17	8.5
12350	450	0	0	NA
12351	450	1	7	7.0

As you assemble your data for analysis: Who used the technology and who did not?

System data shows that class 123 would be in the treatment group and class 450 would be in the control group.

Table 2

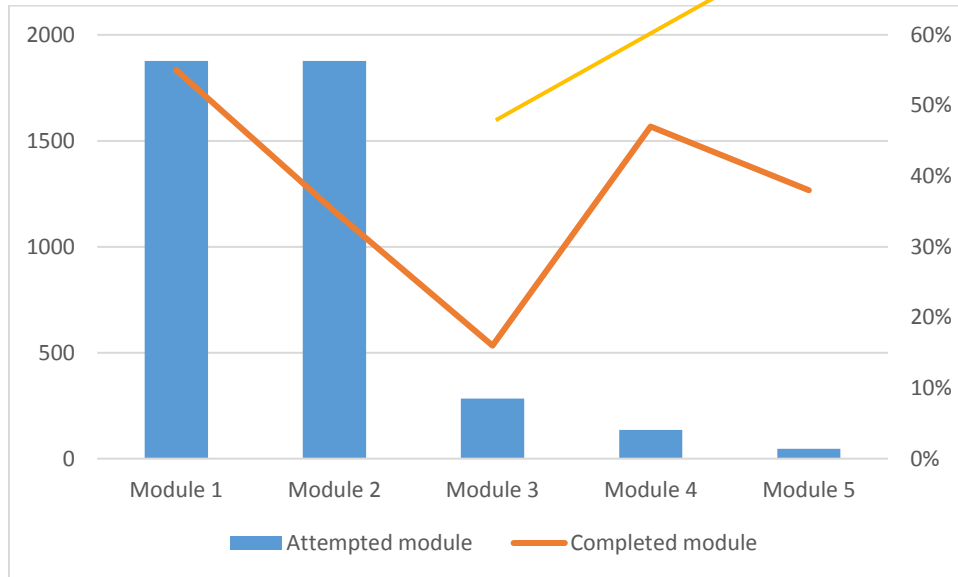
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12346	123	10	130	13.0
12347	123	14	245	17.5
12348	450	0	0	0
12349	450	0	0	0
12350	450	0	0	0
12351	450	0	0	0



For deeper analysis: How did students (or other users) engage with the product (how much did they use the technology, patterns of usage over time, how they scored on embedded assessments within the technology)?

Shows that student engagement with the system dropped rapidly after the first 2 modules

Chart 1:



HOW YOU CAN OBTAIN SYSTEM DATA

Some products enable you to download system data reports directly from their websites. For other products, or if the report isn't what you need, you may need to contact the vendor.

Examples of data you might want to get:

Basic information	If you want to look at usage by course topic	If you want to look at usage over time
<ul style="list-style-type: none"> • Student unique ID • Class / instructor ID • Duration of usage • Number of sessions • Average score on assessments 	<ul style="list-style-type: none"> • Topic(s) covered in each module • Attempted modules (which modules a student started) • Completed modules • Scores on assessments for each module 	<ul style="list-style-type: none"> • Duration of use by month • Number of sessions by month • Modules completed by month



Tips for getting useful system data:

- ✓ Think about whether you want data for individual users, or grouped by class, teacher or school.
- ✓ If you are evaluating impact on students, make sure system data include unique student IDs that can be matched with administrative records.
- ✓ Ask for the report to have one row per student (as opposed to multiple rows per student).
- ✓ Ask for formats that allow data to be manipulated, such as Microsoft Excel or CSV files, not PDFs.

Some things to look for:

- Do some students or classes have little or no usage? If so, you may want to find out why.
- How does *actual* usage compare to what the vendor says *should* happen?

Example: if the vendor says students should spend at least 90 minutes per week using the educational technology, check to see what percentage of students are using the product this much, and how actual average weekly usage compares to this target.

- Are there signs that students are “gaming the system”?

Example: if students make repeated attempts at assessments without spending time in instructional content, they may be trying to click their way through rather than learning the material.

