Digital Promise
Accelerating Innovation in Education

Evaluating Studies of Ed-Tech Products

Purpose: This tool will help district leaders evaluate studies on ed-tech product effectiveness in order to decide whether it is necessary to run a pilot. For example, if high quality, relevant studies are already available to demonstrate a product is effective, a leader could move forward with assessing other factors, such as the product's fit with instructional goals and the school/district environment.

Instructions: The tool is comprised of four sections: product information, study relevancy, study source, and study design. If available, keep a copy of the executive summary or the study itself in front of you. Follow the steps below and select your "best guess" response for each question.

SECTION 1: Product Information

Write your answers in the spaces provided.

YOUR ANSWERS:

1. What is the product designed to do? (write it out as a brief phrase)

2. Does the study show the product is effective for its intended purpose?

YES/NO

If yes, continue to **SECTION 2**. If no, look for other studies on the same product, or consider running a pilot.

SECTION 2: Study Relevancy

Write your answers in the boxes on the right. Use the chart to determine the Study Relevancy score.

YOUR ANSWERS:

3a. Does the product address an educational or administrative need in your school/district? YES/NO

3b. Is the context for the study similar to yours? VERY/SOMEWHAT/ NOT SIMILAR

Look for similarities in student demographics, school/district characteristics, curriculum, professional development needs, available technology, and other factors. If there is no description of the context, rate as "not similar."

Scoring this section:

Answers 3a/3b	Score
Yes/Very	High
Yes/Somewhat	Moderate
Yes/Not Similar	Low
No/Very	Low
No/Somewhat	Low
No/Not Similar	Low

SECTION 2 SCORE: _____

If Study Relevance is 'Moderate' or 'High,' continue to **SECTION 3.**

If Study Relevance is 'Low,' **do not proceed**. Learn more about research-based products on Digital Promise's website.

SECTION 3: Study Source

YOUR ANSWERS:

Choose the most relevant answer for each question and write the associated point totals in the boxes on the right. Tally the total number of points and use the chart to determine Study Source quality.

5. Who conducted the study? (choose one):

a. external evaluator/independent third party (not funded by or associated with product developer/company) (5 points)

b. external evaluator hired by the developer/company (funded by, but not an employee of the product developer/company) (3 points)

c. internal company evaluator (employee of product developer/company) (1 point)

6. Who published the study? (choose one):

a. peer-reviewed journal (5 points)

Articles in peer-reviewed journals are critiqued by experts in the field. You can find them in a school or public library database such as ERIC or EBSCOHost, or look at the journal's credentials on its website.

b. third party such as university/research organization/government/school district (3 points)

c. the technology developer/company (1 point)

7. When was the study completed? Note: this is when the data was collected, not when the study was actually published. (choose one):

a. within the last 2 years (3 points)

b. within the last 3-5 years (2 points)

c. more than 5 years ago (1 point)

TOTAL: 0

Scoring this section:

Total Points	Score
0-6	Low Quality
7-10	Moderate Quality
11-13	High Quality

SECTION 3 SCORE: Zero or Not Calculated

If Study Source is 'High Quality', skip to **SECTION 5.**

If Study Source is 'Moderate Quality' or 'Low Quality', continue to **SECTION 4.**

SECTION 4: Study Design

YOUR ANSWERS:

Write 'Yes' or 'No' in the boxes on the right. Tally the total number of answers of 'Yes' and 'No' and use the chart to determine Study Design score.

8. Was the data collection tool(s) appropriate for what the researcher wanted to measure? YES/NO

Data collection tools include tests, surveys, interviews, or observations.

Appropriate tools:

a. Match what the product claims to do, and track "real-world" effects. For example, if the product is supposed to reduce the number of behavioral incidents, does the tool measure the number of incidents?

b. Are vetted. There should be evidence that the evaluators used a common measurement (for example, MAP exam scores) or, if they made their own tool, that they tested or piloted it first (ECS, 2004).

9. Was there a reasonable number of participants in the study? YES/NO

Generally, the more participants, the better. However, use your judgment about whether the number used in this context and for the stated purpose is reasonable.

Examples: Collecting data from five teachers on ease of implementation of a classroom management product might be reasonable. Conversely, 10 students using a product designed to improve math scores may not be reasonable.

10. Is there a detailed explanation of the study design, and how data was collected and analyzed? YES/NO

You should be able to identify the "who, what, where, when, why and how" of the study. The "how" should be very detailed, so that someone could easily replicate the study.

SECTION 4 CONT.

YOUR ANSWERS:

11. Did participants use the product long enough to get a good sense of its effectiveness, and to be comfortable using it? YES/NO

Compare the product claim to the length of time. Does it seem reasonable that they could gather enough information in that time to support the claim? Look for evaluations that allow users to interact with the product long enough for patterns to begin to emerge on its "normal use."

12. Were study participants and conditions as close to "real" as possible?

YES/NO

Example: If the program is designed to be used in class, was the study run in real classrooms during the school year, with a normal daily schedule, standard classroom supplies/equipment, and typical student-to-teacher ratios?

TOTAL: YES 0 NO 0

Scoring this section:

Number of 'Yes' Answers	Score
1-2	Low Quality
3-4	Moderate Quality
5	High Quality

SECTION 4 SCORE: Zero or Not Calculated

If study design is 'High Quality' or 'Moderate Quality,' continue to **SECTION 5.**

If study design is 'Low Quality,' **do not proceed**. The study is not a reliable source of evidence. Instead, seek out other sources of evidence or consider running a pilot.

SECTION 5: Study Results Are Relevant and Useful!

Prior to purchasing, consider other factors such as:

- Student privacy features
- Fit with school IT system
- Skills required to implement it
- Ongoing technical support

For more information on purchasing ed-tech products and evaluating evidence, visit digitalpromise.org

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