

The Kirkpatrick Model is a widely recognized evaluation framework that helps educators assess the impact and effectiveness of educational interventions. Designed to assess both individual and organizational level interventions, the four levels of the model represent a continuum in which each level becomes more difficult and time-consuming while simultaneously providing richer and more valuable information.¹

Kirkpatrick Level	Description of Level	Evaluative Methods	Example
Level 1: Reaction	Measures participants' immediate response to the research and evaluates their satisfaction, engagement, and interest in the learning experience.	Includes surveys, focus groups, and participant interviews.	Gathering student feedback via a survey designed to assess initial reactions to an intervention.
Level 2: Learning	Determines knowledge and/or skills gained through the research and assesses the participant's comprehension, efficacy, and motivation for using newly acquired knowledge.	Includes pre- and post-tests, practical assignments, and observation of participants' performance.	Assessing student knowledge and understanding through pre and post-tests designed to measure learning.
Level 3: Behavior	Examines the impact of the research on participants' clinical work or daily lives and assesses the transfer of learning from the research setting to real-world situations.	Includes supervisor interviews, self-assessment questionnaires, and the observation of participants' behavior.	Observing changes in student behavior, such as increased engagement, self-efficacy, or improved academic performance.
Level 4: Results	Measures the impact of the research on an institution's goals and objectives and assesses the benefits and outcomes made possible by the research.	Include ones that measure performance and productivity changes such as institutional benchmarks and stakeholder reports.	Tracking long-term results, such as career success or patient outcomes, to determine the overall impact of the intervention.

When using the Kirkpatrick Model to evaluate educational research, each level should be considered and assessed separately. This enables a comprehensive understanding of both the effectiveness and impact of the research. Thus, it is important to intentionally select appropriate evaluation methods and to collect data relevant for each level of assessment. Evaluation methods can include qualitative, quantitative, and mixed-methods data.

A benefit of using the Kirkpatrick Model to evaluate research is that it does not define quality in only one way.² Rather, the model highlights that quality research is possible at each level. The quality of research is dependent on the researcher's ability to design well-developed interventions at each level. It is important to note, however, that while each level can generate valuable information, clinical program evaluations typically report on a combination of methods from levels 1-3.³

Evaluation is important to the continued development of educational interventions.⁴ The Kirkpatrick Model *is one way* to offer both reviewers and authors a simple, established framework for evaluating various research outcomes and ensuring research is judged effectively and appropriately.

Author 1 & 2 Disclaimer: The opinions and assertions expressed herein are those of the author(s) and do not necessarily reflect the official policy or position of the Uniformed Services University of the Health Sciences, the United States Department of Defense, or the Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.

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