

IES Goal Structure for Proposals
https://ies.ed.gov/director/board/briefing/ncer_structure.asp

The goal structure of the Education Research Grants program divides the research process into stages for both theoretical and practical purposes. Individually, the goals are intended to help focus the work of researchers while together they are intended to cover the range of research, development, and evaluation activities necessary for building a scientific enterprise that can provide solutions to the education problems in our nation

The 5 goals are:

- **Goal 1: Exploration.** Research supported under the Exploration goal identifies (1) malleable factors that are associated with education outcomes for students (student outcomes) and (2) factors and conditions that may mediate or moderate the relations between malleable factors and student outcomes. This identification is to be done through the analysis of data (collected by the project and/or using a secondary data set) or the meta-analysis of research studies. By malleable factors, the Institute means factors that can be changed by the education system such as children’s behaviors and skills, teachers’ practices, education programs and their components, school or district management practices, or education policies. Projects under the Exploration goal are to (a) generate hypotheses regarding the potential causal relations between malleable factors and education outcomes, (b) contribute to theories of change for education interventions, (c) contribute to the development of interventions that can improve student outcomes or to identify the conditions that are associated with better implementation of interventions, and (d) identify potentially beneficial interventions.
- **Goal 2: Development and Innovation.** Research supported under the Development and Innovation goal develops innovative education interventions and improves existing education interventions that are to produce beneficial impacts on student outcomes when implemented in authentic education delivery settings (e.g., classrooms, schools, districts). IES considers interventions to encompass curricula, instructional approaches, technology, education practices, programs, and policies. An iterative development process is expected to be used including a cycle of development, implementation, observation, and revision. The cycle is to continue until the interventions can be shown to be usable by the intended end users and feasible for use within the intended authentic delivery setting. A pilot study is done to determine if there is evidence of the promise of the intervention for achieving its intended student outcomes. IES expects that a finding of strong evidence of promise will lead to further research under the Efficacy and Replication goal.
- **Goal 3: Efficacy and Follow-Up.** In 2019 this goal was modified to include three types of studies:
 - **Initial efficacy studies** examining an intervention that has not been rigorously evaluated previously to examine the intervention’s beneficial impact on student education outcomes in comparison to an alternative practice, program, or policy. (max: \$3.3M)
 - **Follow-up studies testing** the longer-term impact of an intervention that has been shown to have beneficial impacts on student education outcomes in a previous or ongoing evaluation study. Follow-up studies may examine a) students who took part in the original study as they enter later grades (or different places) in order to determine if beneficial effects are maintained, or b) the education personnel who implemented the intervention under the original

evaluation study to determine if their continued implementation of the intervention will benefit a new group of students (max: \$1.1M)

- **Retrospective studies** analyzing retrospective (historical) secondary data to test the impact of an intervention implemented in the past (max: \$700K)
- **Goal 4: Replication: Efficacy and Effectiveness.** Since 2013, the Institute has supported Effectiveness Studies that carry out the independent evaluation of fully developed education interventions with prior evidence of efficacy to determine whether they produce a beneficial impact on student education outcomes relative to a counterfactual when they are implemented by the end user under routine conditions in authentic education settings. Starting in FY 2019, the Institute will also support Efficacy Replication and Re-analysis Studies under Goal Four (see definitions below). All studies funded under Goal Four are expected to examine for whom an intervention works and under what conditions. The main differences between Efficacy and Follow-up (Goal Three) and Replication: Efficacy and Effectiveness (Goal Four) are that under Goal Four, (1) the intervention must already have been found to have beneficial impacts on student education outcomes by at least one prior causal impact study and (2) the research plan must include a plan to conduct analyses of implementation and factors that moderate and/or mediate the impacts of the intervention. The Institute supports three types of studies under Goal Four:
 - **Effectiveness Study** – The independent evaluation of a fully developed education intervention with prior evidence of efficacy to determine whether it produces a beneficial impact on student education outcomes relative to a counterfactual when implemented under routine practice in authentic education settings.
 - **Efficacy Replication Study** – An evaluation of a fully developed intervention with prior evidence of efficacy to determine whether it produces a beneficial impact on student outcomes relative to a counterfactual when it is implemented in authentic education settings. *The evaluator may or may not be independent.*
 - **Re -Analysis Study** – A study that re-analyzes existing data from a previous efficacy or effectiveness evaluation using the same or different analytic method in order to determine the reliability or reproducibility of findings
 - The Institute encourages both direct and conceptual replications under Goal Four
- **Goal 5: Measurement.** Research supported under the Measurement goal supports (1) the development of new assessments or refinement of existing assessments and the validation of these assessments or (2) the validation of existing assessments for specific purposes, contexts, and populations. Under refinement, IES includes changing existing assessments or changing the delivery of existing assessments in order to increase efficiency, improve measurement, improve accessibility, or provide accommodation for test takers. Proposed assessments must meet the specific content and sample requirements detailed under the topic to which the application is submitted. Measurement projects include assessments intended to assess students (e.g., for screening, progress monitoring, formative assessment, outcome assessment), education professionals (e.g., credentialing or evaluation of teachers, principals, and related service providers), and/or education systems (e.g., accountability standards). All assessments developed and/or validated must be either directly or indirectly related to measures of student academic outcomes.

Note:

Increasingly important are dissemination plans and cost analyses. Power analyses are also important in Goal 3 and Goal 4 applications, and can be helpful in Goal 2 applications as well.