FOUNDATIONAL DESIGN & DEVELOPMENT EFFICACY RESEARCH EFFECTIVENESS RESEARCH SCALE-UP RESEARCH EARLY-STAGE OR Overview of the **RESEARCH EXPLORATORY RESEARCH RESEARCH** develops new or estimates the impacts of an determines whether an estimates the impacts of an Common Guidelines advances the frontiers of improved interventions to intervention or strategy can intervention when intervention under investigates approaches to for Education education and learning; education problems to achieve well-specified improve outcomes under implemented under conditions of routine develops and refines theory establish the basis for design learning objectives. "ideal" conditions. conditions of routine practice and across a broad Research and and methodology; and and development of new practice. spectrum of populations Development* provides fundamental interventions or to provide and settings. See bit.ly/nsf-ies guide knowledge about teaching evidence for whether an and/or learning. established intervention is **EvaluATE** ready to be tested in an evalu-ate.org efficacy study. Policy and/or STIFICATION Focus the study on important issues in education with implications for policy and practice and explain why the research is needed **Practical** Explain how the research Describe how the intervention differs from current practice **Significance** will generate important Identify implementation setting(s) and population(s) new knowledge Explain why and how intervention will improve education outcomes or system efficiencies Explain why the Explain why the Explain why the intervention will be studied intervention will be studied intervention will be studied under ideal conditions under typical conditions under typical conditions with a broad sample Theoretical and Describe the theoretical and empirical rationale for the study **Empirical Basis** Explain how the study will If researching existing If justification rests on Include evidence from prior studies and /or advance knowledge and intervention, explain why it evidence related to evidence of wide use of the intervention and/or understanding about should be studied through individual components, impact estimates from either (a) one study that includes If a replication study, Early-Stage research rather multiple sites or settings or (b) two studies that include include evidence of posithan an Efficacy study them will lead to outcomes one site or setting Describe theory of action for new study population Complete documentation of intervention and the study Advances in knowledge, Evidence about how to **Project** understanding, or influence education Outcomes Theory of action Description of treatment and comparison conditions methodology outcomes Estimates of impact, including for sample subgroups if possible Impact measures for use in Findings to inform future Determination of future research research appropriate next steps for Implications for theory of action the research Pilot data **Research Plan** Describe research questions, hypotheses, objectives, design, setting, data collection plan, instruments, sampling, analysis, and reporting Describe plan for collecting Identify outcomes of interest; minimum impact size for policy or practical relevance pilot data Describe how validity and reliability will be assured Describe plan for collecting Data collection on implementation, context, and comparison conditions data on feasibility of Subject the study to a series of external, critical reviews of its design and activities via one or more of the following strategies: external review panels or advisory boards proposed by the project and/or the agency, a third-party evaluator, peer review of publications and conference presentations resulting from the project