



UCEA Knowledge Utilization Brief

A Logic Model Framework for Evaluating ARP ESSER Interventions

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In response to the enormous impact of the COVID-19 pandemic on U.S. schools, the U.S. government allocated over \$122 billion of direct financial support to state educational agencies (SEAs). In turn, SEAs allocated much of that funding to local educational agencies (LEAs). This unprecedented funding, known as the American Rescue Plan Elementary and Secondary School Emergency Relief Fund (ARP ESSER), has offered SEAs and LEAs wide spending discretion within a handful of key parameters. One major requirement is that some funds be spent on academic interventions—programs designed to compensate for unfinished learning throughout the course of the pandemic. Additionally, SEAs and LEAs must fund programs in ways that maintain equitable funding for historically marginalized students and target students who need supplemental services the most.

For a general explanation of ARP ESSER, along with teaching notes, read UCEA's [first brief](#) in the series by Thelen-Creps et al. (2021).

While broad spending discretion has given educational leaders freedom to choose which programs to purchase and implement, leaders also face challenges in this complex context. They are charged with implementing broadly designed programs with adaptations for local conditions and evaluating them for continuous improvement—even given rapidly shifting conditions during this persistent pandemic.

As the second installment in **UCEA's ARP ESSER Brief Series**, this knowledge utilization brief provides a framework for understanding the broader ARP ESSER context and how intervention programs are situated within it. Through a theory logic model (Meyer et al., 2021), we detail how leaders can assess intervention programs in their entirety, from theories of change to evaluation of results. We emphasize the need for programs that are sensitive and adapted to local contexts while working toward sustainable improvements, all while meeting the requirements of ARP ESSER. This funding is limited in time and scope, so education—especially public education—has a stake in showing that money was spent responsibly and generated the intended impacts.

Important Acronyms

ARP: American Rescue Plan

ESSER: Elementary and Secondary School Emergency Relief Fund

LEA: Local educational agencies

SEA: State educational agencies

Conceptualizing Program Evaluation Through Logic Models

Logic models are helpful tools for understanding and analyzing the progression of an intervention from early planning stages through implementation and evaluation of results. In the ARP ESSER context, we provide three tiers of logic models: a general logic model for education policy, an ARP ESSER legislation logic model, and an ARP ESSER intervention evaluation logic model. Each model contains several key components, which we explain in detail below. These are theories of change, assumptions, inputs, activities, and results (see Table 1). Taken together, these models provide a framework for understanding the impetus for this massive undertaking.

Table 1*General Theory Logic Model for Educational Interventions*

Component	General description
Theory of change	How does the program envision problems, solutions, and equity?
Assumptions	What does the program assume before it is even implemented?
Inputs	Comprehensively, what resources are required for success?
Activities	What is the program's plan of action?
Results	What outputs, outcomes, and impacts should we expect to see?

Theory of Change: Every intervention should be driven by a theory of change—an overarching idea about a program's goals and how to reach them. All aspects of an intervention flow from this framework.

Assumptions: Well-conceived programs acknowledge a set of assumptions about the approach and operating context. Promising interventions acknowledge potential factors that may limit effectiveness such as stakeholder buy-in and the ability of target populations to access the program. Fortunately, some of the facets of well-conceived and promising programs go beyond conjecture. We do know what works for some forms of learning loss.

Inputs: Comprehensive resources are key to the success of any program. These include time, human resources, money, in-kind resources, facilities, technology, and training.

Activities: The plan of action should be clear, detailed, and articulated well to all personnel involved in implementation. All stakeholders should understand their roles and responsibilities, and continuous evaluation should be built into the plan of action. In most contexts, flexibility and adaptability are essential as well.

Results: These can fall within a wide range of sizes, and each set of results requires a well-suited means of measurement. Outputs are small-scale results such as test scores or report card grades. Outcomes are medium-scale, such as graduation and matriculation in postsecondary education. Impacts are on the largest scale and can include goals that benefit an entire community, such as an increased college graduation rate for an entire city. The goals of the program should be clear, attainable, and measurable in meaningful ways, regardless of their scale.

ARP ESSER Legislation Logic Model

This logic model approach is helpful in framing the vision, purposes, and processes behind ARP ESSER. Understanding the elements of this law provides a basis for understanding the building-level interventions that school leaders interact with every day (see Table 2).

Theory of Change: ARP ESSER is driven by the disrupted learning opportunities that millions of students have experienced throughout the pandemic. The law aims to help students recover lost learning through a massive infusion of funding to SEAs and districts.

Table 2*ARP ESSER Legislation Logic Model*

Component	Legislation description
Theory of change	Additional learning opportunities, holistic services, and expanded personnel are needed to support students' learning recovery.
Assumptions	Local decision-making is best. Some students have been disproportionately impacted by the pandemic. SEAs and LEAs can spend down funds as intended.
Inputs	\$122 billion in direct funding to SEAs. U.S. Department of Education oversight.
Activities	Approval of SEA plans. Oversight. Emphasis on instructional programs, holistic services, personnel
Results	Increased student learning short-, medium-, and long-term measures

Assumptions: Given the wide discretion that SEAs are afforded by the law, ARP ESSER assumes that SEAs are better positioned than the federal government to make the best spending decisions for their own contexts. However, the law's maintenance of effort and maintenance of equity provisions indicate the assumption that, without this regulation, states may have used these funds to decrease their annual allocations to SEAs and general education funding. Indeed, some states did just that under Obama-era recovery funding policies. Relatedly, the law assumes that some students were disproportionately negatively affected by the pandemic and require additional learning supports. ARP ESSER also assumes that SEAs and LEAs will be able to spend down the funds they receive within the designated timeframe.

Inputs: By far, ARP ESSER's largest contribution to pandemic relief is the direct infusion of funds to SEAs, which in turn allocate funds to SEAs. However, the federal government also has made an investment in providing guidance to states for implementation and evaluation.

Activities: ARP ESSER required the U.S. Department of Education to review and approve SEA spending proposals, along with dispersing funding to states. The Department of Education also has some oversight responsibilities. Much of the instruction-related funding is focused on afterschool learning, summer learning, and expanding the corps of instructional personnel.

Results: Many scholars, practitioners, and policymakers argue that assessment of progress will be difficult because we do not have a clear sense of the current state of student learning and the impacts of unfinished learning during the pandemic. Further, results on such a large scale across multiple, diverse contexts can be very difficult to assess. Understanding the outputs, outcomes, and impacts of ARP ESSER will likely take many years of assessment and research.

ARP ESSER Intervention Evaluation Logic Model

Building on the previous two, the following logic model can guide evaluations of ARP ESSER-funded educational interventions. Our approach centers on key questions that leaders can ask about these interventions, paying attention to local contexts, the need for adaptability, and vital equity considerations (see Table 3).

Table 3*ARP ESSER Intervention Evaluation Logic Model*

Component	Questions for ARP ESSER interventions
Theory of change	<p>What does research about learning interventions reveal about programs designed to ameliorate lost opportunities for learning applicable to our conditions?</p> <p>What do we not know about the impacts of interrupted learning on our students? What do we know about the escalation of inequality among our students?</p>
Assumptions	<p>To what degree can the program be adapted for the range of student diversity in our schools/classrooms?</p> <p>How might any of the program's prior reports and data collection apply to our students', schools', and communities' conditions?</p>
Inputs	<p>How complete is the program? Does it demand additional funding to meet the full range of diversity or needed technology in our school communities/classrooms?</p> <p>Does the program provide resources for those students who disappear from school enrollments or cannot engage in remote learning?</p>
Activities	<p>How flexible is the program? Does it adapt for in-person and remote instruction?</p> <p>Was the program implemented with fidelity but flexibility for the conditions our students and schools faced?</p>
Results	<p>For what groups of students has this program shown results? Are these results solely in-house reports or does data from third-party reports show results?</p> <p>What kinds of feedback and adaptation data does the program provide? How often? For what audiences are these data reports designed?</p>

Theory of Change: ARP ESSER-funded interventions were selected to align with the legislation's aims. Some states even selected a set of predetermined interventions for LEAs to choose from. Even in those cases, leaders should understand the overarching frameworks that drive the interventions used in schools. There should be clear connections between how programs are intended to address the impacts of the pandemic and the learning-centered goals that programs are designed to achieve.

- What problem definition and projected resolutions did the program provide?
- Is equity at the center of both?
- To what degree did the program involve the community in addressing the desired outcomes?
- Does the program have ambitious yet attainable goals?

Assumptions: As with all interventions, instructional programs are based on a set of assumptions. Programs should be evaluated based on considerations of both the local context and the broader educational landscape because both levels influence program efficacy. The primary consideration, though, is a focus on the local conditions.

- Did the program have all the information necessary to achieve maximum impact?
- Among the program specifications, were there gaps in addressing diversity in students' learning needs and community awareness about the program's potential outcomes?
- Per ARP ESSER requirements, did the program address the needs of students who required the most help? Was the program able to reach those students?
- To what degree could the program be adapted for the range of student diversity in our school/classrooms?

Inputs: ARP ESSER's infusion of funds into LEAs has been a dramatic resource. However, a dynamic set of inputs goes far beyond funding. Interventions also have required a tremendous amount of time, training, infrastructure, personnel, and broader stakeholder engagement. Evaluators should think comprehensively and strategically about the resources this intervention has needed.

- Was the program able to acquire the personnel needed for implementation?
- How complete was the program? Comprehensively, what resources were required for success? What essential resources have not been available?
- Have resources been distributed in an equitable manner?
- How much time was saved or added to teacher tasks or to community and parent support or contributions?
- Do leaders need to account for any factors unique to the context? Does this intervention need even more funding to fully succeed in this context?

Activities: Very effective programs provide as many engaging activities for students with fewer opportunities-to-learn as for students with adequate support and access and as for those considered gifted and talented. Adaptability is key as well. The ongoing pandemic disruption constantly emphasizes how necessary the ability to pivot is. Several important factors requiring adaptation considerations need attention regardless of location:

- How well did the program adapt to conditions, including pivots between different modalities?
- How were all stakeholders supported? Was there adequate communication to all stakeholders about opportunities and responsibilities?
- How were equity concerns addressed? How much of the transition burden was borne by students and teachers rather than program resources?
- Did the program align with other school services, such as mental and physical health services and with classroom and extended learning, such as out-of-school time (OST) and summer learning? Was the program aligned with community-based learning services, such as enrichment experiences (extracurricular), help with homework (cocurricular), and extended time to learn (cocurricular; Anthony, 2019; Fowlkes & McWhorter, 2018)?
- Did these activities generate meaningful, useful data as an ongoing activity?
- To what degree did the program permit adaptations for the range of student diversity in schools and classrooms?

Results: Given the tremendous financial investment, the needs of millions of students, and the politically charged nature of this policy context, achieving and reporting the results of interventions are essential.

- What outputs, outcomes, and impacts on student learning can we observe?
- For what groups of students has this program shown results? What are the implications for equity?
- What kinds of feedback and adaptation data did the program provide? How often? For what audiences are these data reports designed?
- How does the program connect its results to its overall theory of change? Do results meet the original stated goals and objectives, in alignment with ARP ESSER legislation?

Considerations: Insights From Existing Research & Pathways for Future Work

What does research about learning interventions reveal about programs designed to ameliorate lost opportunities for learning?

The research on extending opportunities for learning expanded throughout the past decade as schools implemented federally required extended learning plans for students with disabilities under the reauthorization of the Individuals with Disabilities Education Act. Additionally, the federal education accountability requirements, in various iterations since before the 2000s, targeted extra funding for school-based learning plans among students with low academic test performance as well as other social indicators such as low income or minoritized identities. Finally, federal programs for community development included funding for OST learning programs directed at youth. Implementation reports and research exist on these programs aimed at students with specific learning needs based on lack of social opportunities, economic disadvantages, and developmental delays as well as physical or mental disabilities (Anthony, 2019; Fowlkes & McWhorter, 2018).

What do we *not* know about the impacts of interrupted learning impacts on all students and the escalation of inequity in learning?

The existing research reports program effectiveness for groups of students with known obstacles to their learning. The pandemic distributed obstacles to learning for a larger range of students than pre-pandemic programs for disadvantaged youth and those with learning and other disabilities.

Among the pandemic's challenges to opportunities to learn, the quality of instruction as well as the delivery of instruction represent two large unknown effects on learning. With a shift to digital learning environments, teachers, students, and parents reported lowered instructional quality coupled with inequitable access to the digital environment. At the time of adoption, many packaged programs did not have sufficient evidence to suggest efficacy or effectiveness. Additionally, many of the pandemic-packaged programs focus on in-school time rather than OST, and most of these packages were not used among the OST groups with demonstrated programs effectiveness as well as preexisting relationships within communities, schools, and families (Council of Chief State School Officers, 2021; Gordan & Conway, 2020).

Given limited achievement data during the pandemic years, the perceptions and experiences dominate the evaluation of these programs. Data about student performance are emergent, requiring more time to measure than perceptual data. The implications for school leaders include enlisting support to monitor student performance data while addressing the immediate concerns perceived by teachers, parents, and students such as mental health concerns and digital access.

Conclusion

How does a district or school decide if an intervention mitigated students' unfinished learning? Beyond monitoring the implementation steps and assuring the enactment of the action plan, leaders need to assess results based on the program's assumptions and projected indicators of success. Well-conceptualized programs include an extensive accounting of all these aspects and a deeply integrated commitment to equity in every aspect.

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