

Blended Learning Measurement Framework



Many educators are interested in measuring their implementation of blended learning, but don't know where to start. Two main goals for measurement are often ensuring that (1) successes are accurately captured and documented, and (2) inferences about what is working are appropriate.

The measurement framework outlined below incorporates The Learning Accelerator's vision of blended learning: *the strategic integration of in-person learning and technology to enable personalization, competency-based progression and the use of real-time data*. The framework focuses specifically on the teaching and learning within blended learning, to provide actionable information about implementation and success. More discussion about the research base that supports this framework can be found in [The Learning Accelerator's Blended Learning Research Clearinghouse](#). It is best suited for anyone interested in developing school- or classroom-level blended learning measurement systems.

Within the measurement framework, each numbered element represents a specific, measurable element of a blended learning initiative. The complex, unmeasurable elements (which are not numbered) have been broken down into simpler, more measurable ones. The organization of the framework represents the order in which the elements occur during implementation. On the left, inputs are systemic and contextual – they occur before implementation. On the right, impacts are long-term – they take a while to happen after implementation has begun, and they only occur after the activities, outputs, and outcomes have occurred.

This framework isn't the only one that exists for blended learning, nor is it "all or nothing" (feel free to use some, all, or none of it). It is not meant to be prescriptive, but rather it is a conversation starter through which you can make decisions about what to measure in your blended learning initiative.

Measurement Framework Definitions

Some of the terms we use in the framework are defined as follows:

Inputs: are the contexts or settings in which implementation is taking place. These include student and teacher demographics, and other characteristics, that may influence your blended learning initiative's design or objectives from the get-go, before anything is put in place. Inputs can also include resources, supports, and policies that are determined at the state, district, or school level – but affect implementation at the classroom level. Ideally, these also influence the selection of a blended learning model or models. Measuring, or at least acknowledging, these contextual elements helps align your objectives, activities, and eventual outcomes and impacts for blended learning.

Activities: are the actions and processes that make up your initiative – the things you are doing (differently) in order to meet your desired objectives. Measuring activities ensures that you are in fact implementing the things you set out to, and, later on in the measurement process, can help you understand what specific practices are associated with your results. It is especially helpful if you have measured the activities that distinguish your initiative from what you were doing before, or from what others are doing.

Outputs: are the numerical results of a process. Outputs can include the number of teachers or students that are participating in your initiative, the number of hours of support provided, or the number of devices used. Outputs do not quantify change that is happening as a result of your initiative, instead, they establish the path through which change might occur. This provides (often immediate) actionable data about implementation, and highlights potential points of early breakdown that can quickly and easily be fixed.

Outcomes: are the nearest-term changes that you expect to see as a result of your inputs, activities, and outputs. They are usually first or almost first on the list of indicators or metrics for any measurement endeavor – the things you think about first when you envision what "success" looks like.

Impacts: are the long-term changes you wish to make through implementation. Often, these are the same as your initial objectives, or your overall goals for the initiative. Equally as often, impacts are time-dependent, and cannot be measured at the beginning of implementation.

INPUTS	ACTIVITES	OUTPUTS	OUTCOMES	IMPACT
<p>¹ Student demographics</p> <p>² Teacher demographics</p> <ul style="list-style-type: none"> • ³ Competencies • ⁴ Support <p>Technology infrastructure:</p> <ul style="list-style-type: none"> • ⁵ Student-to-device ratio • ⁶ Bandwidth • ⁷ Software <p>⁸ Administrator/ Leader demographics</p> <p>Other infrastructure</p> <ul style="list-style-type: none"> • ⁹ Financial resources • ¹⁰ Physical space/layout 	<p>¹¹ Integrate in-person learning and technology via (a) blended learning model(s):</p> <ul style="list-style-type: none"> • Rotation • Flex • A La Carte • Enriched Virtual <p>Personalize learning:</p> <ul style="list-style-type: none"> • ¹² Support students' transition into BL environments • ¹³ Support teachers' transition into BL environments • ¹⁴ Teachers and students set challenging goals together <p>Enable competency-based progression:</p> <ul style="list-style-type: none"> • ¹⁵ Facilitate mastery-learning • ¹⁶ Anchor student progression with competency-based performance measures <p>¹⁷ Use real-time data to make student-level, teacher-led instructional decisions</p>	<p>¹⁸ Number of BL classrooms</p> <p>¹⁹ Number of students learning in a BL environment</p> <ul style="list-style-type: none"> • ²⁰ Number of students with sufficient access to devices and bandwidth <p>²¹ Number of teachers blending learning</p> <ul style="list-style-type: none"> • ²² Number of professional development hours <p>²³ Number of teachers using real-time data instructionally</p>	<p>Student engaged learning</p> <ul style="list-style-type: none"> • ²⁴ Student accountability for learning (ownership/agency) • ²⁵ Mastery goals (intrinsic motivations) for learning • ²⁶ Choice & autonomy via guided/independent practice <p>Teacher-scaffolded, individualized learning</p> <ul style="list-style-type: none"> • ²⁷ Small group/1:1 interactions with students (efficient use of time) • ²⁸ Differentiated, personalized, or targeted instruction <p>Highly effective instructional actions</p> <ul style="list-style-type: none"> • ²⁹ Promotion of transfer through varied contexts or representations • ³⁰ Explanatory, two way feedback • ³¹ Formative assessment, deep questioning • ³² Collaborative learning <p>Positive school climate</p> <ul style="list-style-type: none"> • ³³ Deeper knowledge of achievement (shared understanding of progress/goals) • ³⁴ Less frustration, positive attitudes to teaching/learning • ³⁵ Student & teacher self-efficacy • ³⁶ Cultivation of growth mindset 	<p>Highly effective teaching and learning:</p> <p>Student impacts (college and career readiness for all):</p> <ul style="list-style-type: none"> • ³⁷ Academic achievement • ³⁸ Proficiency • ³⁹ Individual student growth • ⁴⁰ Graduation rate • ⁴¹ Reduced gaps • ⁴² Emotional well-being • Cognitive skills & behavioral habits of success <ul style="list-style-type: none"> • ⁴³ Grit • ⁴⁴ Optimism • ⁴⁵ Self-control: school work • ⁴⁶ Self-control: interpersonal • ⁴⁷ Gratitude • ⁴⁸ Social intelligence • ⁴⁹ Curiosity • ⁵⁰ Zest • ⁵¹ Self-confidence • ⁵² Attendance • ⁵³ Behavior/discipline <p>⁵⁴ Teacher impacts: Professional engagement</p>

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