

Formative Assessment in Early Childhood Education

Using Ignite by Hatch™ Progress Monitoring Insights to Drive Student Support Initiatives

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OVERVIEW

Executive Summary

This white paper argues that formative assessment is the most useful assessment type in early childhood education because it gives educators real-time information that they can use to adjust instruction while learning is happening. It emphasizes progress monitoring as the primary formative assessment practice, showing how frequent, low-stakes data collection helps teachers identify gaps early, respond to children's rapid developmental changes, and prevent small difficulties from becoming larger problems.

The paper also explains how progress monitoring data from Ignite by Hatch™ strengthens student support frameworks, such as the pyramid model, RTI, and MTSS. Across these models, ongoing data helps educators decide when to maintain supports, intensify interventions, or shift strategies, making instruction more responsive and more effective.

Ultimately, MTSS is highlighted as the strongest early childhood framework because it combines academic, behavioral, developmental, and family supports in one preventive system. By pairing high-quality instruction with consistent progress monitoring, early childhood programs can better meet individual needs and improve outcomes for all children.

THE THROUGH LINE

When teachers have access to data and act on it quickly, they can better match instruction, intervention, and family partnership to each child's developmental needs.

SECTION ONE

Formative Assessment in Early Childhood Education

Assessment is a valuable component of any instructional cycle, providing educators with a better understanding of how the students in their classroom are demonstrating proficiency in learning standards. While diagnostic assessment captures what students know prior to instruction, summative assessment captures what students have learned at the conclusion of instruction. Arguably, formative assessment, which takes place in the time frame throughout instruction, provides the most critical details of all for educators.

The NWEA posits that formative assessment is an ongoing, low-stakes process used by teachers during instruction to monitor student progress, with the primary purpose of identifying learning gaps and misunderstandings in real time, ensuring that teachers can adjust teaching strategies and provide immediate, actionable feedback to students and lesson design. Because this form of assessment happens regularly throughout the instructional process, it provides valuable insight for teachers about how students are learning in the moment. This student-centered approach is intended to help teachers gauge students' understanding, which better informs lesson planning and instruction.

Progress monitoring, arguably the most widely adopted method of formative assessment, records and tracks growth regularly to determine whether a student is improving toward a learning goal. When educators employ progress

monitoring in their assessment portfolio, they are measuring the mastery of skills based on classroom instruction. Reading fluency checks, math skill checks, worksheets with questions to check for mastery, observational checklists, and digital tools to check for understanding are common forms of progress monitoring used in the early learning classroom.

In the early years, children's skills in language, literacy, numeracy, and self-regulation develop rapidly and unevenly, making one-time assessments insufficient for instructional decision-making. Given this and the rapid developmental change in children in preschool throughout early elementary levels, progress monitoring is a uniquely critical formative assessment practice for educators to employ.

Advances in educational technology have made it even easier for educators to provide engaging progress monitoring activities. Rather than require teachers to generate additional mastery checks, digital tools like Ignite by Hatch™ deliver short, interactive assessments that automatically generate performance data aligned to foundational skills, helping teachers track children's learning throughout the school year. Because Ignite is designed for children in grades pre-K through first, it is an appealing, developmentally appropriate assessment tool to support early childhood education educators. When teachers have access to real-time data, they can measure learning as it is happening. As a result, they can make more informed instructional decisions that support all students.

Moreover, because children's brains are ripe for learning and development in preschool through early elementary levels, early intervention is critical for correcting any skill development gaps that may be evident through assessments. Formative assessment, including ongoing progress monitoring, provides frequent, low-stakes information about how children are responding to instruction and interventions so that educators can adjust supports before gaps widen. For example, if diagnostic assessments signal a need for intervention, educators can determine a road map for instruction to better support a student throughout the year. Thus, for real-time understanding and measuring of how children develop skills, a formative assessment measure such as progress monitoring should also be employed to ensure that instruction remains at the appropriate levels.

“*Ignite by Hatch™ is a great progress monitoring tool. I use it to see where my children are performing with skills and then I make my small group instruction based on Ignite reports.*

— **Andrew Donnelly**

Special Education Teacher, Jersey City Public Schools

SECTION TWO

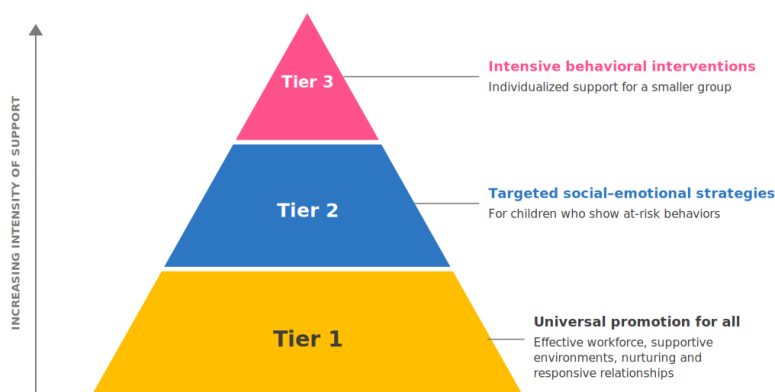
Student Support Initiatives and Frameworks

In some cases, students might not respond to whole-class instruction in the desired way; this presents in various forms of struggle or stalled growth, such as stagnant progress in mastery checks. In the Hatch Insights™ educator dashboard, these signals are made explicit in the Intervention Needed Report; here, teachers not only identify which students need assistance, but also in which skill by learning domain. In cases where children signal they are stalled, educators commonly implement student support measures to better address learning for all children in their classrooms.

THE PYRAMID MODEL

One of the more commonly adopted frameworks for student support in early childhood education is the pyramid model. According to the NCMPI, designed as a multi-tiered system of support for early childhood education, the pyramid model focuses entirely on promoting young children's healthy social-emotional development and preventing challenging behaviors. Program-wide implementation is suggested for a systemic effort that includes leaders, teachers, and families; oftentimes, this is referred to as positive behavior support (PBS) at the program level.

Tier one is the foundation of the pyramid model, acknowledging an effective workforce and calling out high-quality supportive environments and nurturing and responsive relationships for all students. Targeted social-emotional strategies comprise tier two, and intensive behavioral interventions make up tier three support. To qualify for tier two or three intervention, children must demonstrate at-risk behaviors that are tracked throughout instruction by the educator.



The Pyramid Model. Adapted from National Center for Pyramid Model Innovations (2023); see References.

RESPONSIVENESS TO INTERVENTION

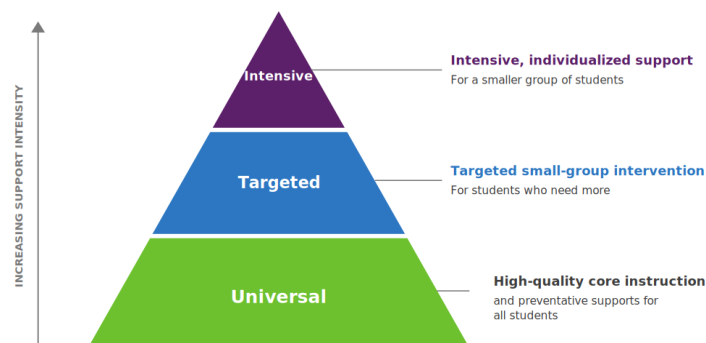
In 2004, the Individuals with Disabilities Education Act (IDEA) was reauthorized and the responsiveness to intervention (RTI) framework was embraced as an aligned student support initiative. RTI is a school-based framework designed to identify students who are struggling early and provide support before difficulties widen. It begins with strong, evidence-based classroom instruction for all students, then uses frequent progress monitoring to determine whether a student is making adequate growth and responding to instruction.

Students who are not making enough progress receive increasingly intensive interventions in smaller groups or individually, with decisions guided by the data collected over time. RTI also helps schools distinguish between a student who simply needs more targeted instruction and one who might need a fuller evaluation for a learning disability. By design, RTI is student-centered and focuses on the impact of academic interventions.

MULTI-TIERED SYSTEM OF SUPPORT

Expanding on the positive attributes of the RTI model, the multi-tiered system of support (MTSS) framework includes characteristics of the RTI model, like universal screening, data-driven decision-making, and growing levels of support intensity based on student need; however, the MTSS framework is designed to be preventative and is employed as a school-wide approach for all students, folding in social-emotional supports and partnerships with families.

In the universal level of the MTSS framework, all students receive high-quality core instruction and preventative supports. Students in need of additional support receive targeted small-group interventions, and a smaller group of students receive intensive, individualized support. In order for students to move through these support tiers, schools must use ongoing data to adjust services and improve student outcomes over time.



The MTSS framework. Adapted from Harlacher & Bailey (2025); see References.

IMPLEMENTING A DATA-DRIVEN FRAMEWORK

Because data collection is critical for determining how children move across tiers within any support framework, determining a data collection process is arguably equally as important as determining the framework itself. For early childhood educators, one of the greatest challenges within a tiered support framework is obtaining timely, reliable data without sacrificing instructional time. Tools that automatically capture student performance and organize progress monitoring data like the Hatch Insights™ platform allow teachers and administrators to make instructional decisions using current evidence rather than periodic assessment snapshots.

Ultimately, determining which framework to use in an early education program is important to ensure that supports are aligned to program goals. If your program goals are to focus solely on behavioral outcomes, the pyramid model can offer structured support; however, if your immediate priority is to support academic development, RTI is a stronger fit. For a pre-K through second grade or early childhood program, MTSS is often the better framework because it can connect academic, developmental, and family-support more holistically.

“As an administrator, I find the Insights dashboard very helpful. It's a quick pulse check for where children are performing with our RISE initiative. The reports generated through Ignite are a major benefit for getting another look at student data.

— Robin Jones

Director of Instruction, ECE, D.C. Public School System

SECTION THREE

Using Formative Assessment to Drive Support Initiatives

Aligning assessments to student support initiatives ensures that proof points demonstrate the effectiveness of each support layer put in place in early childhood programs. While diagnostic assessments like screeners provide signals about whether students are at risk, formative assessments allow for ongoing measurement of impact.

When educators employ progress monitoring, one of the most common methods of formative assessment, in their assessment portfolio, they are measuring the mastery of skills based on classroom instruction. Moreover, the use of progress monitoring allows for ongoing measurement of skills development, helping educators understand how each classroom lesson impacts their students. A digital dashboard presenting ongoing progress monitoring data like the Hatch Insights™ platform provides standards-aligned formative assessment data readily and with ease.

Each of the mentioned student support initiatives calls for the use of progress monitoring as a check point for understanding the effectiveness of interventions. In the pyramid model, progress monitoring is a key step used in targeted supports and individualized interventions to track how well a child is learning social-emotional skills and to determine whether a support plan is working. In an RTI framework, progress monitoring measures are used to build ongoing data on a student's academic growth over time. Educators then compare that data to the initial goals set to decide whether the intervention is working, needs to be adjusted, or should be intensified. And finally, MTSS uses progress monitoring as an ongoing check on whether prevention supports are helping students, starting in the universal tier and continuing through targeted and intensive tiers. Student support teams use that data to decide when to keep, adjust, or intensify interventions so that problems are addressed early before they become more serious. As such, progress monitoring is a critical step no matter which student support initiative a school or center may be employing, ensuring that regular data points are captured throughout the student support process.

“After only two weeks of using Ignite, I was really pleased to hear that the children were already at 70% kinder ready! That to me was very impressive. Being able to look at the success and growth across schools speaks volumes to the program.

— Sandra Lopez

Asst. Superintendent – Elementary, Brownsville CISD

IN CLOSING

Conclusion

In early childhood classrooms, formative assessment practices like progress monitoring give educators the real-time insight they need to teach responsively, support growth early, and prevent small skill gaps from becoming larger learning challenges. Whether a program uses the pyramid model, RTI, or MTSS, the common thread is the same: When teachers gather ongoing data and act on it quickly, they can better match instruction, intervention, and family partnership to each child's developmental needs.

The instructional principles described throughout this paper are most effective when educators can collect reliable formative assessment data without increasing assessment burden. That is precisely the design philosophy behind Ignite by Hatch. Rather than separating instruction from assessment, Ignite integrates the two, allowing the purposeful practice of skills to generate meaningful evidence of student learning that teachers can immediately use to guide instruction. Each child's experience is intentionally structured so that play is not only engaging but also evidentiary, generating observable indicators of growth aligned to early learning standards and developmental benchmarks. This data collection supports ongoing formative assessment practices within a tiered student support framework, enabling educators to respond proactively to student needs while maintaining a developmentally appropriate, play-based learning environment.

While the pyramid model and RTI are thorough frameworks for student support, MTSS is a strong student support framework for early childhood education because it takes a preventive, whole-child approach that supports academic, developmental, behavioral, and family needs within one coordinated system. In the early years, when children develop quickly and unevenly, MTSS is especially helpful because it combines high-quality core instruction for all students with targeted and intensive supports for children who need more help, while ongoing progress monitoring shows whether those supports are working. This allows educators to respond early, adjust instruction in real time, and prevent small skill gaps or behavioral concerns from widening. Just as importantly, MTSS fits the realities of pre-K through second grade settings because it supports collaboration among teachers, leaders, and families rather than treating student needs in separate silos.

Many states are moving toward MTSS in pre-K because it gives early childhood programs a single, prevention-oriented way to organize academic, behavioral, social-emotional, and family supports from the start of schooling. Nationally, all 50 states have adopted some form of a tiered support system, and many states now define MTSS as the framework for aligning services and using regular data to support learners beginning in pre-K. States such as Maryland and Missouri describe MTSS as a comprehensive system that supports students beginning in pre-K and across the broader school continuum. As universal pre-K becomes more readily available, the MTSS framework presents a nice option to unify student support systems across the pre-K through 12th grade landscape.

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Our kids did an amazing job on the Texas KEA – comparing the end of year assessment data for Pre-K and what we had from Hatch – everything seemed to merge with eight of our nine campuses! So this year, our kindergarten students took the MAP K-12 academic performance assessment for the first time and that data with Hatch was the exact same pattern across our campuses! Around 70% of our Pre-K kids were kinder ready, which we hadn't seen in a year.

— Claudia Larrasquitu

Early Childhood Coordinator, Los Fresnos CISD

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For more information about Ignite by Hatch™ and Hatch Insights™, visit
www.hatchearlylearning.com



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