

Formative Assessment for Elementary Grades: *A Look into Gateway Formative Pilot*

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Objectives

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Understanding Formative Assessments

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Takeaways from Gateway Pilot

3

Formative Options for Elementary Grades

4

Discussion and Brainstorming



5 Pillars of Formative Assessment

Imbedded in Curriculum

Curriculum Coherence:

Formative assessments must be tied to the specific curriculum and/or learning progressions used to guide instruction. The more directly tied to the curriculum the assessment is, the more relevant and actionable the results will be (e.g., lesson, activity, unit).

Provide Meaningful Feedback

Support Deeper Thinking:

Ensure our assessment activities elicit the evidence of the complex thinking we desire for students

Report Appropriate Grain Size:

Results must be presented at a grain size at which teachers and students can take action.

Immediacy of Feedback

Timely Results:

Feedback is best when it occurs soon after or even during the performance. The speed of returning results is related to the grain size and the connection with the enacted curriculum. The more fine-grained the curricular topic the quicker the feedback should occur to maximize learning gains.

Inform Instruction

Easily Understood & Actionable:

The formative assessment literature suggests the results must be presented in a way that teachers and students understand what to do next. That is, the meaning of results should be easily understood and be actionable.

Focused on Learning Not Points

Developmental Not Summative:

Formative assessment has minimal or no points associated with these assessment activities. This approach creates an environment where learning is the primary goal. By lowering the stakes involved in assessment, students are encouraged to shift the focus of assessment from point earning to knowledge attainment.



Uses for Formative Assessments

Identify Individual or Group Learning Gaps

- *Reports can be sorted to show individual performance on all items or to aggregate group performance on the same item. Teachers can view both the correct response and the response selected by the student(s) for each item.*

Model Testing Strategies

- Teachers can model creative problem resolution as they discuss item level rationales with students.

Measure Student Performance on Unit-Level Objectives

- *Teachers can select item blocks to offer short quizzes that check for understanding or assemble multiple blocks to assess understanding across an entire unit.*



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Gateway Formative Assessment Pilot 2023

- 29 Schools
- Over 500 items developed for Design and Modeling
- Over 250 items developed for Automation and Robotics
- 1,000 assessments delivered
- Tagged to third party standards, measuring for differentiated learning, filtered for item type and time to test.



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Using Quiz Results

- **Test Summary Report:** Data for each student's score per item on the *Informative Assessment*
- **Student Report:** More comprehensive data for each student's performance on each item
- **Item Report:** Data for each item with aggregated student response analysis



Stealth Assessments

- Integrated seamlessly into the learning experience
- Gathers data without disrupting educational activities
- Happens naturally as part of the learning environment
- Provides real-time insights, timely feedback, and personalized interventions.



Designing a Game-Based Assessment for Early Learners

1. Align learning objectives with age-appropriate developmental milestones.
2. Consider elements like points, levels, challenges, and rewards to maintain engagement.
3. Design the game to accommodate visual, auditory, and kinesthetic learners.
4. Balance challenge and support.
5. Ensure age-appropriate themes and graphics.
6. Ensure that the game is accessible to all learners.
7. Address privacy concerns and ensure that data collected is used responsibly.



Discussion & Brainstorming

Discussion norms

- Avoid assumptions or generalizations.
- Speak about your own experiences (rather than speaking for others).
- Listen openly to the experiences of others.
- We encourage diverse perspectives – today's goal is not to find consensus, but to generate ideas and thinking.

