

APPENDIX C

Survey

States Use of Formative Assessments



K-3 Mathematics Formative Assessment State Survey

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Formative Assessment Study Background and Purpose

The Florida Department of Education (FDOE) has partnered with the Florida Center for Research in Science, Technology, Engineering and Mathematics (FCR-STEM) at Florida State University to develop a formative assessment system in mathematics for grades K-3.

The goal of the formative assessment system is to improve K-3 students' achievement in mathematics. The intent of the system is to enable teachers to identify gaps or weaknesses in students' knowledge and understanding of the foundational concepts and skills they will need for future mathematics learning. An additional intent is to equip teachers with research-based feedback strategies and rubric-based guidance for targeting instruction based upon students' understandings.

The purpose of this survey is to collect information on other states' formative assessment systems in mathematics. We are interested in learning about (a) the attributes of the systems, (b) the funding source(s) supporting the systems, (c) the degree of professional development provided teachers, and (d) the challenges other states' have experienced in developing and sustaining a statewide formative assessment system in mathematics.

The information that you provide is critical to our initiative. There is a gap in understanding and a lack of agreement regarding what constitutes effective formative assessment systems and how best to use them to improve student learning, especially in the area of mathematics. Your responses to this survey will be compiled and analyzed, and a report of states' use of formative assessment systems will be produced. By responding to this survey, you will be contributing to educators' and policymakers' knowledge and understanding of formative assessment systems and the current role they play in statewide education initiatives.

Your participation in the study will require completion of a 29-question on-line survey about your state's formative assessment system in mathematics.

Your participation is voluntary, and you may quit the survey at any time or choose not to answer some questions. No individuals' names will be mentioned in the report of survey findings. Only the names of states will be used. You will have an opportunity to review a draft of the report to verify that the information is accurate and complete prior to the final report and publication.

Kris Ellington, Associate Director of FCR-STEM, is the Principal Investigator of this study. Should you have any questions or concerns about the study, please contact her at keellington@admin.fsu.edu or 850-644-0013. You may also contact the Project Manager, Karen DeMeester, at kdemeester@lsi.fsu.edu or 850-645-6869.



Section I. State and Reporter Information

1. Please select the state that you are reporting for.*



Student Assessment Director Information

2. Last Name*

3. First Name*

4. Preferred E-mail Address*

5. Are you the State Student Assessment Director?

Yes

If no, please describe your position and responsibilities.

6. If yes, how long have you been the State Student Assessment Director?

Less than 5 years

5 to 9 years

10 years or more



Section II. State Formative Assessment Information

As mentioned previously, there is confusion and debate amongst educators and policymakers regarding the purpose and characteristics of formative assessment systems. For this survey, we use the following definition of formative assessment established by the Council of Chief State School Officers: A process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes (2008, p.3).

7. Based on the CCSSO definition does your state currently provide, or intend to provide, a formative assessment system in mathematics?

- Yes
 No

8. If yes, please provide website URLs for available documentation (or, provide via e-mail to keellington@admin.fsu.edu) for planning, design, implementation, and ongoing support of this assessment system.



Section II. State Formative Assessment Information

9. Which of the following best describes the status of your state's formative assessment system in mathematics?

- Under development by the state
 Under development by contractor/vendor
 In the pilot stage
 Fully implemented in all schools throughout the state
 Other, please specify

10. Were learning progressions developed in the design of this system?

No

Yes. (Describe how the learning progressions were developed or any models that were used).

11. How are assessment items selected or developed (please include descriptions of item types)?

12. What criteria are used to judge the technical quality of the formative assessment tasks?

13. Please describe key challenges you experienced in developing your state's formative assessment system in mathematics.



Section III. Use of Formative Assessment System

14. Select the grade levels that your state provides mathematics formative assessment . (Select all that apply.)

- Kindergarten
- First Grade
- Second Grade
- Third Grade
- Fourth Grade
- Fifth Grade
- Sixth Grade
- Seventh Grade
- Eighth Grade
- Ninth Grade
- Tenth Grade
- Eleventh Grade
- Twelveth Grade
- Other (e.g., Algebra 1)?

15. Are teachers required to use the formative assessment system in these grades?

- Yes
- No

16. What is the format or method used to administer the formative assessment items? (Select all that apply.)

- Paper and pencil (hard copy)
- Observation
- Interview protocol
- By hand-held device
- Computer
- Other, please specify

17. By whom are the formative assessment items administered? (Select all that apply.)

Trained assessor

Classroom teacher

Other, please specify

18. How is your state's formative assesment system in mathematics used? (Select all that apply.)

To provide immediate task-level feedback as part of an instructional activity.

To monitor students' progress toward achieving a specific state standard or benchmark or a curriculum-based measure.

To predict student performance at the end of a specific time period.

To predict student performance on state standardized tests.

To screen in order to identify at-risk students.

For program evaluation and improvement.

For accountability purposes.

Other, please specify

19. If the system is used for accountability purposes, to whom does this apply? (Select all that apply.)

Teacher

School

Other, please specify.

20. Is your state's formative assessment system in mathematics designed to: (Select all that apply.)

A. Require students to explain reasoning for response.

B. Reveal misconceptions about the content.

C. Require students to prove their assertions.

D. Other (Please explain.)

21. How are student responses evaluated in the formative assessment system?

- Machine scored locally
- Machine scored by state/contractor
- Teacher scored using answer key
- Teacher scored using rubrics
- Not formally scored (used immediately as evidence of students' understanding to direct teacher feedback).
- Other, please specify

22. Does your state provide professional development in the ADMINISTRATION of the formative assessment system?

- Yes
- No

23. If yes, please provide a brief description of the professional development.

24. Does your state provide professional development for teachers in the USE of the formative assessment system as a tool to improve instruction (e.g., interpreting student responses, providing feedback, modifying instruction)?

- Yes
- No

25. If yes, please provide a brief description of the professional development.



Section IV. Cost and Budget

26. What is the estimated cost per student for developing the formative assessment system in mathematics?

- \$0-\$5 per student
- \$6-\$10 per student
- \$11-\$15 per student
- \$16-\$20 per student
- Other, please specify

27. What is the annual budget for maintaining the formative assessment system in mathematics?

\$

28. What is the estimated annual cost to provide professional development in the administration and/or use of the formative assessment system in mathematics?

\$

29. How many educators receive professional development annually in the administration and/or use of the formative assessment system in mathematics?

Survey Results for States with Formative Assessment Systems

	Deleware	Indiana	Iowa	Kansas	Louisiana	Michigan	Montana	Nebraska	New Jersey	North Carolina	North Dakota	Rhode Island	Utah	Vermont
Status of FA System	Under development by the state	Under development by the state	Under development by the state	Fully implemented in all schools throughout the state	The system has been developed by the state. Used in some districts, but not all.	In the pilot stage	Used as part of a statewide program on formative assessment.	Fully implemented in all schools throughout the state	In pilot stage.	Under development by state	Under development by the state.	No answer.	Under development by the state.	Fully implemented in all schools throughout the state.
Learning Progressions	No answer	No	No	No	No	No	No answer	No	No	Will be included emphasized on PD around FA.	They will be.	No answer.	No	No.
Task Development	By teachers	Mini item review for all items in statewide system	Not applicable. Providing PD for teacher use only.	By an outside vendor	By contract with outside vendor then review by teachers.	Not applicable. Do not develop items for FA process.	No answer	By teachers	By an outside vendor.	Teachers develop items with benchmark tool and NC DOE approves.	with content standards/ benchmarks on current state assessment	No answer.	Item pool comes from previous CRT exams and teacher written.	No answer.
Task Types	No answer	MC, Short Answer, and extended (essay).	Not applicable.	No answer.	No answer.	Not applicable.	No answer	All types; Selected and constructed response.	MC and OE.	No answer.	No answer.	No answer.	Forced Response, essay, short answer.	No answer.
Criteria Used to Judge FA Tasks	No answer	standard item statistics using vendor tools	No answer	content and bias review by state panel	No answer.	No answer	No answer	six quality criteria developed by assessment experts	alignment with standards, monitored by DOE and content specialists	Not yet determined	Reliability and validity for direct alignment to benchmarks.	No answer.	USDOE review.	No answer.
Challenges	Different curricular materials; budget to pay teachers to help.	Since it starts with a customized shelf product, our largest issue has been.... (incomplete)	No answer	No answer.	Funding; online system design; item development and review; training.	Scaling up is an issue to train educators and receive buy-in from administrators.	No answer	Teacher learning; Assessment literacy; Mistrust of assessment instrument for accountability	Time. Can not exercise as much oversight of vendor as would like.	Educating staff on difference between formative and benchmark assessment.	Timeliness of results to encourage modification of instruction.	No answer.	Resources, items are expensive to develop and deploy	Locating good coaches to monitor and mentor classroom teachers.
Grade levels	K-5	K-8	No answer	3-8, 11	No answer.	Specific grades not targeted	No answer	K-12	3-8	modules for K-12, piloting in 3-9.	3-12	No answer.	1-12	3-8, 11
FA System Required?	Yes	No	No answer	No	No	No	No	No	No	No answer.	Yes	No answer.	No	No
Mode of Administration	Paper and pencil; Observation; Hand-held device; computer	Paper and pencil; Hand-held device; computer	No answer	Computer	Computer	Depends on educator and topic of study	TBA	A mix of all	Paper and pencil; Hand-held device; computer	Paper and pencil; Observation; Interview protocol; Hand-held device; computer.	Computer	No answer.	Computer	Paper and pencil; Observation; Hand-held device
Administered by?	Trained assessor; Classroom teacher	Trained assessor	No answer	Classroom teacher	Classroom teacher	No formal assessment items	TBA	Classroom teacher	Classroom teacher	Benchmark tool under development	Classroom teacher	No answer	Classroom teacher	Classroom teacher
System Purpose	task-level feedback; monitor students' progress; screening	task-level feedback; monitor students' progress; predict student performance	task-level feedback; monitor students' progress	monitor students' progress	task-level feedback; monitor students' progress	task-level feedback; monitor students' progress; for program evaluation and improvement	task-level feedback	screen; accountability; task-level feedback; monitor progress	task-level feedback; monitor progress; program evaluation & improvement	Benchmark tool under development	predict student performance	No answer.	task-level feedback; monitor progress; predict performance	task-level feedback
Accountability	No answer	No answer	No answer	No answer.	No answer.	No answer	No answer	School	No answer	Benchmark tool under development--not being developed for accountability	Teacher; school	No answer.	No answer	No answer.
Instructional Purpose	Require students to explain reasoning; to prove assertions; Reveal misconceptions	Require students to explain reasoning; Reveal misconceptions	Require students to explain reasoning; to prove assertions; Reveal misconceptions	No answer.	No answer.	No answer	Require students to explain reasoning	A mix of all	Reveal misconceptions; require students to prove assertions	All will be required in the benchmark tool.	Require students to explain reasoning; to prove assertions.	No answer.	Reveal misconceptions	Require students to explain reasoning; to prove assertions; reveal misconceptions
Scoring	Teacher scored using rubrics in collaboration with another teacher. Sometimes not formally scored.	Online/technology tools instantly score	Not formally scored	Machine scored by state contractor	Machine scored by state contractor	Not formally scored	No answer	A mix of all	Teacher scored using rubrics	Benchmark tool under development. Self and peer assessments for students	Machine scored locally	No answer.	Machine scored by state contractor	Not formally scored
PD in Administration	No	Yes	No answer	Yes	Yes	Yes	Yes	Yes	Yes	No answer.	Yes	No answer.	Yes	Yes
PD Administration Description	Not at this time	2-3 day train the trainer models required for adopting schools.	No answer	Informal and conducted as needed by state consultants at summer academies	No answer.	PD not driven by state, but coaching staff provides support and training to educators	Online professional development webinars	Delivered by districts on how to write items, assessments, directions, protocols, apply them to tasks	Considerable training from vendor implementation managers and regional workshops.	Will be required when finalized.	Training on administration, evaluation of results and implications for future instruction	No answer.	No answer	Contract with ETS to recruit and train coaches. The PD is embedded.
PD in Use of FA	Yes	Yes	No answer	Yes	Yes	Yes	Yes	Yes	Yes	No answer.	Yes	No answer.	Yes	Yes
PD Use Description	Ongoing and extended to all grades	Separate workshop in data analysis and report usage	No answer	Informal or conducted at conferences around the state	No answer.	PD consists of separate training sessions for coaches, team meetings, and classroom meetings	Still in planning stage	Training consists of item analysis, data analysis, matching skills inside the standards to appropriate teaching strategies.	Vendor staff provide workshops in assessment literacy and using results to improve instruction.	Developing modules to help teachers do FA with or without a tool or system, as well as to incorporate a tool into FA	No answer.	No answer.	No answer	Contract with ETS to recruit and train coaches. The PD is embedded.
System Cost per student	No answer	\$11-\$15 per student	\$0-\$5 per student	Unsure	No answer.	No estimated per student cost, but paying \$240K for 100 teams this year	No answer	No answer	\$11-\$15 per student	No answer.	\$6-\$10 per student	No answer.	No answer	No answer.
Annual Budget	No answer	Can not be easily determined (\$1.5 million total)	No answer	No answer.	No answer.	Approx \$240K and covers all subjects	No answer	\$=1.6 for the overall budget and that includes reading, writing, and science	\$=1.2M	\$=To be determined	No answer.	No answer.	\$=100,000	No answer.
PD Cost	No answer	Can not be easily determined (\$250K total?)	No answer	No answer.	No answer.	Approx \$240K and covers all subjects	No answer	\$=Most of the 1.6	\$=1.2M	\$=To be determined	No answer.	No answer.	No answer	No answer.
PD Number	No answer	Varies--voluntary program (Summer 2008, approx 1,800)	No answer	No answer.	No answer.	Approx 500-600	No answer	Probably half of the teachers in the state 12,000 out of 24,000	Several hundred	Still under development	No answer.	No answer.	No answer	No answer.