

2018-19 Evaluation of Reasoning Mind

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At-a-Glance

In 2018-19, 2,267 Dallas Independent School District (ISD) students in grades two to five used the Reasoning Mind (RM) mathematics program. The number of RM schools funded centrally through Title I funds decreased from 147 in 2016-17 to 57 in 2017-18, and then to 14 schools in 2018-19 due to the budget cuts over the years. This evaluation was limited to 12 out of 14 elementary schools that were funded centrally through Title I funds and used RM Foundations (RM curriculum).¹ Accordingly, the number of RM students decreased from 29,714 in 2016-17 to 11,311 in 2017-18, and then to 2,267 in 2018-19. The 2018-19 budget was \$241,168, which was about a third of the 2017-18 budget (\$847,763).

On June 30, 2018, Imagine Learning acquired RM. Transition from RM to Imagine Learning delayed processing of the purchase orders (POs) for RM. POs for 2018-19 were approved on November 15, 2018, which prevented schools from using RM until after that time. RM Foundations (RM curriculum) will be discontinued after the 2018-19 school year. As a result, this report was limited to student demographic characteristics, RM implementation, and campus staff survey findings.

Methodology

Context and process information were gathered from internal documents, the RM dashboard, and interviews with RM and Dallas ISD program staff. The evaluator conducted interviews with the RM program staff and the district mathematics director. Student data were extracted from the October 2018 Public Education Information Management System (PEIMS) file and RM files. Frequency and descriptive analyses were used to examine student demographic characteristics and student use of RM. Frequency and crosstab analyses were conducted for campus staff surveys, which were administered in March and April 2019.

What were the demographic characteristics of RM students?

A total of 2,267 students used RM during 2018-19. This included 656 (5.8%) of the district's second grade students, 832 (7.2%) of the district's third-grade students, 672 (5.5%) of the district's fourth-grade students, and 107 (0.9%) of the district's fifth-grade

students. The majority of RM students were economically disadvantaged (89%) and Hispanic (79%). Fifty-nine percent were English learners (ELs).

How was the RM program implemented?

Due to the delayed POs, fewer than 10 students in the district logged in to the RM program during the first month (November) RM became available. As shown in Table 1, of the 2,501 students who were registered as of May 13, 2019, 59 percent of district RM students started using the program in December 2018 (range: 0% to 96%). The percentages of students using RM increased each month and by March, most students (93%) were using RM. Moreover, by March, between 93 and 100 percent of students were using RM at 10 of the 12 campuses. The exceptions were Casa View (78%) and Holland (54%).

Table 1: Percentage of RM Students Who Logged In 2018-19 by Campus

Campus	Grades Regis.	n Regis.	2018 Dec. %	2019 Jan. %	2019 Feb. %	2019 Mar. %
Adams, J	2, 3	128	63	97	98	100
Burnet	2, 3, 4	281	73	94	96	97
Casa View	2, 3	188	0	52	77	78
Dorsey	3, 4	162	96	98	99	99
Gonzalez	2, 3, 4	276	67	97	97	97
Henderson	2, 3, 4	197	39	98	98	98
Hexter	2, 3, 4	256	93	95	95	95
Holland	2, 3, 4	172	40	42	54	54
Reagan	2, 3, 4	133	16	24	51	93
Smith	2, 3, 4, 5	447	82	83	83	99
Starks	2, 3, 4	118	0	92	92	99
Zaragoza	2, 3, 4	143	59	69	85	99
All	2, 3, 4, 5	2,501	59	81	87	93

Source: Reasoning Mind (RM) dashboard accessed on 5/13/2019.
Note: Dec.=December. Jan.=January. Feb.=February. Mar.=March.
Regis.=registered. The number of registered students (n=2,501) was not equal to the number of actual RM students (n=2,267). RM students were limited to those who were in the RM database and in Dallas ISD as of the Public Education Information Management System (PEIMS) snapshot date (10/26/2018) and with RM hours equal to or greater than 0.1 in 2018-19.

In previous years, two student targets (hour and accuracy) were set to ensure a high level of student implementation. However, due to the transition to Imagine Learning and the lateness of the POs, targets were not set for 2018-19. Instead, RM schools and

¹ Of the 14 RM schools in 2018-19, two schools were excluded from the analyses: one school (Rogers) was partly funded centrally through Title I funds, and the other school (Hooe) was funded centrally but used RM's test preparation

mode (STAAR Readiness) only. There were five elementary schools that purchased RM with their own budget and used RM's STAAR Readiness only: Allen, Ervin, Frank, Lowe, and Titche. Those schools were also excluded from the analyses.

teachers used RM as needed. As of March 31, 2019, the cumulative mean hours online were 13 for second grade (5 to 22), 14 for third grade (4 to 28), 13 for fourth grade (1 to 19), and 50 for fifth grade (Table 2). Mean accuracy rates ranged from 70 to 90 percent (70 to 79% for second grade, 74 to 85% for third grade, 71 to 90% for fourth grade, and 79% for fifth grade).

Table 2: 2018-19 RM Student Hour and Accuracy Results by Campus and Grade

Campus	RM Hours		Accuracy	
	n	Mean	n	Mean
Grade 2				
Adams, J	57	17.7	57	73.9
Burnet	88	22.0	88	75.4
Casa View	48	5.1	38	79.1
Gonzalez	75	11.8	75	79.1
Henderson	61	10.4	59	72.8
Hexter	94	20.0	93	78.0
Holland	2	*	0	*
Reagan	37	5.3	37	74.3
Smith	115	5.9	115	73.6
Starks	31	4.8	31	69.9
Zaragoza	48	13.7	45	70.1
All	656	12.6	638	75.0
Grade 3				
Adams, J	60	18.3	60	77.5
Burnet	91	28.3	90	84.2
Casa View	94	13.7	89	81.3
Dorsey	67	17.4	67	84.8
Gonzalez	81	6.8	79	83.8
Henderson	57	14.2	49	82.6
Hexter	73	9.2	47	83.6
Holland	58	4.3	56	79.4
Reagan	46	5.4	46	81.8
Smith	120	17.9	120	81.6
Starks	46	14.4	44	74.2
Zaragoza	39	8.8	34	83.1
All	832	14.2	781	81.7
Grade 4				
Burnet	83	12.1	42	71.9
Dorsey	82	10.0	82	70.9
Gonzalez	103	16.2	103	77.7
Henderson	70	17.1	70	80.6
Hexter	70	7.9	70	76.5
Holland	25	1.4	18	90.1
Reagan	43	2.0	18	74.9
Smith	104	18.5	100	74.5
Starks	47	19.2	47	76.0
Zaragoza	45	13.2	45	71.6
All	672	13.1	595	75.7
Grade 5				
Smith	107	50.3	107	78.5
Grades 2 to 5				
All	2,267	15.1	2,121	77.9

Source: Public Education Information Management System (PEIMS) district data file: 10/26/2018. Reasoning Mind (RM) implementation data file through March 31, 2019: 4/29/2019.

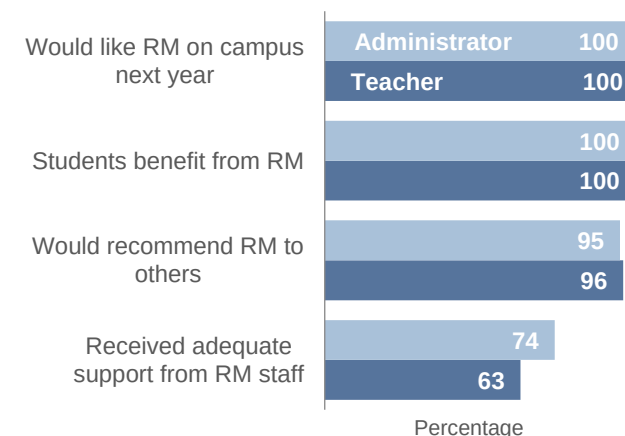
Note: Accuracy=Level A Guided Study accuracy. The number of students with hour and accuracy data differ because some students did not have accuracy data. RM students were limited to those who were in the RM database and in Dallas ISD as of PEIMS snapshot date (10/26/2018) and with RM hours equal to or greater than 0.1 in 2018-19. Cells marked with an asterisk (*) indicate results were not reported due to fewer than five students used RM.

What were teacher and administrator perceptions of RM?

The survey response rate was 65 percent for campus administrators as well as for teachers. Upon removal of invalid responses, 19 campus administrators and 49 teachers were included in analyses. Of the 19 administrators, 48 percent were campus instructional coaches, 42 percent were principals, five percent were assistant principals, and another five percent were "Other." Seventy-four percent of campus administrators indicated that the primary RM contact was a campus instructional coach; others reported the contact as the principal (21%), or assistant principal (5%). Four percent of teacher respondents indicated that they taught more than one grade. About 65 percent of teachers indicated that they used other supplemental mathematics programs (e.g., Imagine Math, IXL, ST Math, Houghton Mifflin Harcourt Personal Math Trainer, etc.) other than RM during 2018-19.

Over 95 percent of campus administrators and teachers responded that they would like RM on campus next year (100% for both) and would recommend RM to others (95% for campus administrators and 96% for teachers - Figure 1). All respondents agreed or strongly agreed that students benefited from RM. Whereas 74 percent of campus administrators indicated that teachers at their campus received adequate support from RM staff, 63 percent of teachers indicated that they received adequate support from RM staff.

Figure 1: Percentage of RM Campus Staff Members that "Agreed" or "Strongly Agreed" with Overall Items



Source: Reasoning Mind (RM) campus staff (teacher and administrator) surveys administered in Spring 2019.

About 53 percent of campus administrators and between 25 and 27 percent of teachers cited general technology-related issues (53% for campus administrators and 27% for teachers) and computer access issues (53% and 25%, respectively) as challenges that kept them from implementing RM as expected. Several teachers and campus administrators commented that late approval for access to RM

hindered implementation. Some schools did not have access to the RM curriculum until the spring semester. In addition, several commented that the lack of training, especially for new teachers, was a challenge for implementation.

Recommendation

When planning for future technology-based programs like RM, make certain all campuses have adequate working technology and are reporting issues to Information Technology as problems occur. As in past years, results of interviews and surveys revealed that technology-related issues were challenges to implementation. It will be important to continue to add and upgrade campus technology while ensuring ample campus support and timely submission of tickets to Information Technology.

References

Kim, M. & Bush, J. (2018). 2017-18 Evaluation of Reasoning Mind. Dallas, TX: Dallas Independent School District.

An electronic version of this report can be found at www.dallasisd.org/Page/888. For more information, please contact Program Evaluation at evaluation@dallasisd.org.

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