STEM Aca Sc c T ac a L a : Pa c a I S F b a 2018

!

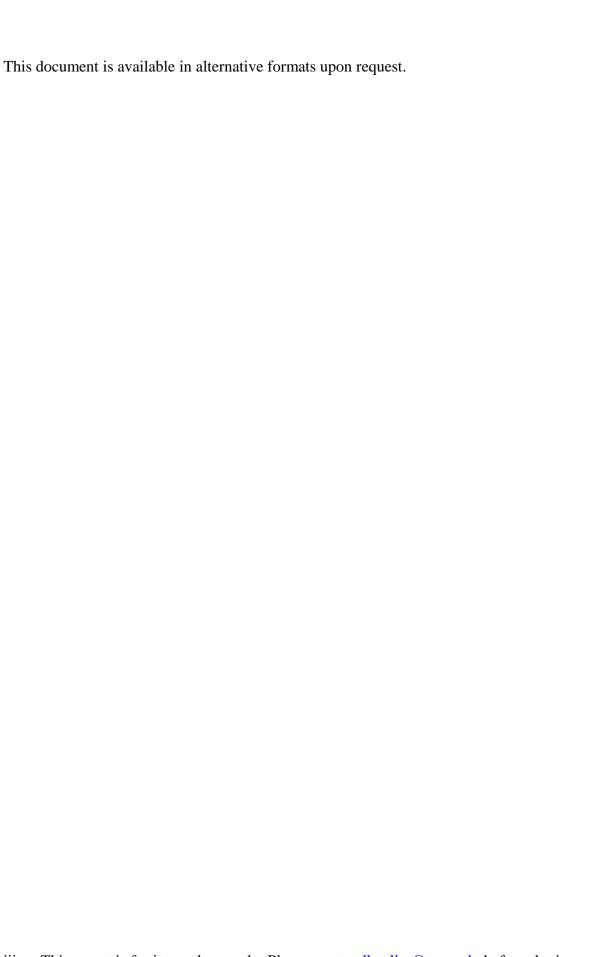
S 2018

Published by

Southern Methodist University
Department of Education Policy & Leadership
Simmons School of Education & Human Development
PO Box 750114
Dallas, TX 75275-0114

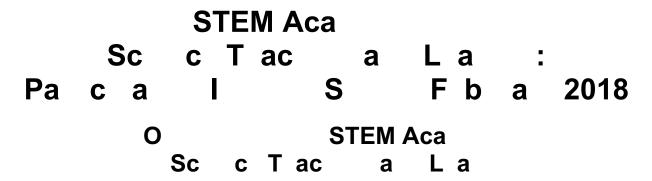
Contact information: rme@smu.edu

This research was supported by The Texas Instruments Foundation; GT00317. Opinions expressed herein do not necessarily reflect those of The Texas Inst t



Ab ac

The STEM Academy for Science Teachers and Leaders program is designed to impact 70 percent of middle school science teachers in Dallas ISD by the third year of implementation (Perry et al., 2017). After meeting program goals for recruitment in Year 1, the program experienced challenges during recruitment in Year 2. A need existed to identify teachers' and school leaders' perceptions when deciding whether to participate in the program. In response to this need, middle school science teachers and school leaders took a survey measuring their knowledge of and engagement in the program's recruitment process. Results indicated that almost half of teachers (41%) were not aware of the program. For teachers who were aware of the program, half of teachers already had master's degrees or were currently enrolled in a master's degree program (50%), suggesting that course credit was not an effective incentive for participation. These findings informed changes to the communication strategy and incentives included in the recruitment plan and the program more broadly. Only 17 science teachers from 16 of 40 middle schools completed this survey; therefore, these findings are not generalizable to all other middle school science teachers in the school district, but rather represent a subset of teachers' perceptions.



The STEM Academy for Science Teachers and Leaders program is the result of a collaborative effort between Southern Methodist University (SMU)

During Year 1, the goal was for 18 teachers and six school leaders at six schools to participate in the program. The program was able to successfully recruit 16 teachers (89% of goal) and six school leaders at six middle schools. These teachers' and school leaders' participation will be ongoing for a total of three years. One teacher withdrew from the program during the first year.

Initially, during Year 2, the goal was to enroll 81 teachers and 15 administrators at 15 schools in the program. Based on participation from the previous year, the modified goal was to enroll 78 teachers. These counts include: (a) the 15 persisting Year 1 teachers and 6 Year 1 school leaders, (b) 36 additional Grades 6 and 7 science teachers at the six previously participating middle schools, (c) 27 Grade 8 science teachers at nine new middle schools, and (d) nine school leaders at nine new middle schools.

The recruitment plan for the STEM Academy was ipating



Teachers' responses to the survey items are summarized in this section by topic.

I a a R c V

Of those 17 teachers, 71% (n=12) had not watched the STEM Academy Informational Video. Those 12 teachers described the communication that they had received, depicted in Table 2.

Table 2. Communication Received by Teachers Who Had Not Watched the Video (n=12)

Communication	Frequency
None	7 (58%)
Received an email	3 (25%)
Communication from instructional coach and	1 (8%)
participating teachers	
Not sure	1 (8%)

Table 5. Teacher Recommendations to Increase Interest in the STEM Academy

Teacher Recommendation

Frequency

Need to email teachers directly (e.g., "Email

individual emails to principals, assistant principals, campus instructional coaches, and teachers who signed the letter of intent.

In summary, although only a small number of teachers completed the survey and their responses likely do not represent all teachers' perceptions in Dallas ISD, the teacher responses highlighted areas of critical need in the communication plan and the incentives offered by the program. The STEM Academy was very successful in retaining teachers once they committed to participating (only one teacher withdrew); however, it is critical that as the program expands to include more teachers and schools that the incentives and communication strategy is relevant and effective in recruiting teachers. Because the 17 teachers' responses included in this report only represent a small subset of the full population of middle school teachers (n > 200), the generalizations made from these data are limited in that they are biased toward those who completed the survey and do not reflect the perceptions of the full population of science teachers. Given these limitations, changes based on the findings in this report should be monitored carefully in order to ensure the desired outcomes.

National Research Council. (2012). Academies Press: Washington, D.C. The National

Perry, L., Jungman Reeder, M., Brattain, K., Hatfield, C., & Ketterlin-Geller, L. R. (2017).

Report prepared by Research in Mathematics Education. Dallas, TX: Southern Methodist University.

Appendix A – STEM Academy for Science Teachers and Leaders Recruitment Plan



Α	В	Т	а	а	L	а	ı		S			
ersTharkera												
e Crencenn												e oraze
le vour eche	nol nord	Hoin	oting in t	ho STI		locd	omy for	Salan	oo Toool	aore on	1 Loods	ore?
AS NOTA BODG	garatel 6											
												•



11

