

Early Learning Scholarships Program Evaluation Report

Appendix A:

Early Learning Scholarship Invoice Analysis Memo

Minnesota Management Analysis & Development

November 2015

Memo

To: Lisa Barnidge and Sandy Myers, MDE

From: Demian Moore and Kirby Pitman, MAD

Date: December 7th, 2015- updated Dec. 15th

Subject: Early Learning Scholarship Invoice Analysis

Data Description and Methodology:

This memo contains tables summarizing the analysis of the invoice data provided by MDE to MAD. The MDE invoice data included 2290 scholarship children from all regions. A sample of 332 were pulled from this data for analysis. Regional administrators in each region were given a list of children in the sample and asked to pull all invoices submitted for those children over a 12 month period. Several of the cases in the sample were excluded for various reasons including they were duplicates in the data due to slight differences in spelling, they had what appeared to be data entry errors with parameters far exceeding those possible, the data entered for them exceeded the time frame requested. The total number of children that remained in the analysis was 288. (Note that ID numbers were created by MAD but included here in case you would like further information on an ID mentioned).

This analysis contains information on aggregated total award amounts by region, metro v. Great MN, pathway, program type and Parent Aware star rating. Information on results codes are also included by pathway, program type and star rating.

Note that while total award amounts analyzed here are all within a single 12-month period, the date ranges for those 12 months varies across IDs. That is, aggregated data for individual IDs do not encompass comparable 12-month periods. Further, the number of months covered for each individual ID varies greatly but the maximum is twelve. Thus, only aggregate totals, means, and medians should be compared. Number of days absent and attended were requested, however, because of the large variation in time reported this data is not comparable across all children. Thus, days absent/attended tables are not included here. As we discussed earlier, the table below provides a list of details for children who have more than 50 days absent. There are various possible explanations for this, including data entry error. But it may also be the case that all or some of these children experienced valid reasons for their high absent rates. Also, it is of course possible to have a high number of absences in a given year (e.g. 120) within the program parameters. One child exceed that threshold, with 150 days absent (ID 198). Another child (ID 199) had reported days absent of 97. Both of these children are from region 10. Out of the 288 unique IDs, there are 10 with more than 50 days absent.

IDs with More the 50 Days Absent

ID	Days Absent	Award	Region	Program Type	Pathway Type	STAR Rating
107	69	\$3,339	2	Head Start	II	Four
140	62	\$4,732	5	Public School Based	II	Four
173	54	\$2,949	10	Child Care Center	I	Four
198	150	\$1,711	10	Family Child Care	I	Four
199	97	\$550	10	Child Care Center	II	Four
304	78	\$3,355	11	Child Care Center	II	Four
341	65	\$3,984	11	Child Care Center	II	Four
348	54	\$2,269	11	Child Care Center	II	Four
370	61	\$1,170	10	Child Care center	II	Four

Data Tables:

Award Amount

Total Award Amount

Total	Mean	Median	Min	Max
\$699,448	\$2,429	\$2,051	\$13	\$5,000

(N=288 unique IDs with reported award amounts of \$5,000 or less for a single 12-month period).

Region 11 contains both the largest number of unique IDs (175) and the largest total award amount (\$371,788). Region 2 is at the other end of the spectrum, with only a single recipient, with a total award amount of \$3,339. The total award amounts in Region 11 range from \$13 to \$5,628. About 40% of Region 11 recipients are Pathway I students.

Total Award Amount by Region

	Total	Mean	Median
Region 1 (N=7)	\$21,344	\$3,049	\$3,207
Region 2 (N=1)	\$3,339	\$3,339	\$3,339
Region 3 (N=11)	\$23,518	\$2,138	\$1,537
Region 4 (N=7)	\$17,537	\$2,505	\$2,376
Region 5 (N=19)	\$46,689	\$2,457	\$2,002
Region 6E (N=5)	\$16,338	\$3,268	\$3,000

Region 6W (N=7)	\$19,525	\$2,789	\$1,980
Region 7E (N=9)	\$20,179	\$2,242	\$1,886
Region 7W (N=20)	\$54,474	\$2,724	\$2,208
Region 8 (N=2)	\$3,373	\$1,687	N/A
Region 9 (N=17)	\$46,086	\$2,711	\$2,389
Region 10 (N=31)	\$76,254	\$4,766	\$2,251
Region 11 (N=152)	\$350,792	\$2,308	\$1,720

Award Amount by Aggregated Regions

	Total	Mean	Median
Greater MN (N=136)	\$348,656	\$2,564	\$2,272
Metro (N=152)	\$350,792	\$2,308	\$1,720

Award Amount by Pathway

	Total	Mean	Median
Pathway I (N=138)	\$372,839	\$2,702	\$2,668
Pathway II (N=150)	\$326,609	\$2,177	\$1,782

Award Amount by Pathway by Aggregated Regions

	Total	Mean	Median
Regions 1-10, Pathway I (N=80)	\$211,850	\$2,648	\$2,528
Regions 1-10, Pathway II (N=56)	\$136,806	\$2,443	\$2,088
Region 11, Pathway I (N=58)	\$160,989	\$2,776	\$2,798
Region 11, Pathway II (N=94)	\$189,903	\$2,019	\$1,462

Award Amount by Program Type

One ID (#136) included an award total of \$400, but no program type or star rating.

	Total	Mean	Median
Child Care Center (N=144)	\$330,087	\$2,292	\$1,746
Family Child Care (N=16)	\$51,044	\$3,190	\$2,953
Head Start (N=41)	\$140,358	\$3,423	\$4,824
Public School Based Program (N=84)	\$168,900	\$2,312	\$1,786
Blank/"No Program" (N=3)	\$4,659		

Award Amount by Program Type by Aggregated Regions

	Total	Mean	Median
Great MN			
Childcare Center (N=37)	\$111,813	\$3,022	\$3,328
Family Child Care (N=14)	\$43,089	\$3,078	\$2,895
Head Start (N=19)	\$54,567	\$2,872	\$3,000
Public School Based Program (N=64)	\$134,128	\$2,096	\$1,870
Blank/"No Program" (N=2)	\$5,059	Min=\$400	Max=\$4,659
Metro			
Child Care Center (N=107)	\$218,274	\$2,040	\$1,455
Family Child Care (N=2)	\$7,955	Min=\$2,955	Max=\$5,000
Head Start (N=22)	\$85,791	\$3,900	\$4,912
Public School Based Program (N=20)	\$34,772	\$1,739	\$1,560
Blank/"No Program" (N=1)	\$4,000		

Award Amount by STAR Rating

	Total	Mean	Median
STAR 1 (N=3)	\$8,219	\$2,740	\$2,722
STAR 2 (N=9)	\$26,559	\$2,951	\$3,190
STAR 3 (N=8)	\$26,945	\$3,368	\$3,102
STAR 4 (N=265)	\$629,716	\$2,376	\$1,870
“Signed Participation” (N=1)	\$2,950		
Blank (N=2)	\$5,059		

Award Amount by STAR Rating by Aggregated Regions

	Total	Mean	Median
Greater MN			
STAR 1 (N=2)	\$5,497	Min=\$1,537	Max=\$3,960
STAR 2 (N=8)	\$25,104	\$3,138	\$3,259
STAR 3 (N=7)	\$21,945	\$3,135	\$2,547
STAR 4 (N=116)	\$288,101	\$2,484	\$2,122
“Signed Participation” (N=1)	\$2,950		
Blank/“No Program” (N=2)	\$5,059	Min=\$400	Max=\$4,659
Metro			
STAR 1 (N=1)	\$2,722		
STAR 2 (N=1)	\$1,455		
STAR 3 (N=1)	\$5,000		
STAR 4 (N=147)	\$341,615	\$2,293	\$1,699

Results Codes

If a code was listed on any invoice for a given ID then that code was counted once, but only once. For example, code 5 may have only been checked on one occasion out of many invoices for a particular ID, while code 1 may have been checked on multiple invoices for that same ID. For that unique ID, both code 1 and code 5 are only counted once. The percentages in the tables below sum to over 100 percent because multiple codes could be chosen for each invoice.

The results codes definitions as stated on the invoices form are:

- 1= an increase in access to quality ECE programs.
- 2= an increase in # of children served.
- 3= an increase in child's time in the program.
- 4= covers cost of parent fees, charges for attendance.
- 5= additional services (i.e. transportation, etc.).

Results Codes Total (count)

Code	Total	% of Total (288)
1	101	35%
2	74	26%
3	81	28%
4	238	83%
5	123	43%

Results Codes by Pathway (count)

Code	Pathway I (N=138)		Pathway II (N=150)	
	#	%	#	%
1	49	36%	52	35%
2	30	22%	44	29%
3	48	35%	33	22%
4	122	88%	116	77%
5	34	25%	89	59%

Results Codes by Program Type (count)

Code	Child Care Center (N=145)		Family Child Care (N=16)		Head Start (N=42)		Public School Based Program (N=84)	
	#	%	#	%	#	%	#	%
1	47	32%	7	44%	11	26%	35	42%
2	22	15%	6	38%	12	29%	33	39%
3	28	19%	8	50%	16	38%	27	32%
4	139	96%	14	88%	13	31%	70	83%
5	67	46%	2	13%	19	45%	34	40%

Results Codes by STAR Rating (count)

Code	STAR 1 (N=3)	STAR 2 (N=9)	STAR 3 (N=8)	STAR 4 (N=256)	“Signed Participation” (N=1)	Blank (N=2)
1	1	2	5	92	0	1
2	0	1	3	70	0	0
3	2	5	4	67	1	1
4	3	9	7	217	1	1
5	1	3	2	117	0	0

Percentages for Star 4 providers are in the table below. Due to the low numbers of providers in the other star levels, percentages are not included here.

Code	STAR 4 %
1	36%
2	27%
3	26%
4	85%
5	46%