

## 2014-2015 Rock-It Academy (RIA) Evaluation Summary

Over the year beginning in summer 2014 and ending in spring 2015, RIA served 136 K-5 children at Neil Armstrong Elementary School (NA) in the Bettendorf Community School District (BCSD). This was nearly half (45.5%) of the children at NA. In summer 2014, RIA served 64 children. During the school year, 85 attended the morning RIA program, 72 attended the afterschool program, and 62 attended both before and after school. Twenty-four children attended RIA both in summer 2014 and during the 2014-15 school year.

RIA participants were very similar to other NA children by grade level and gender, but RIA participants were more likely than other children to be non-white and have an IEP. Six of each ten RIA participants (60.2%) were eligible for free or reduced cost lunches, while slightly more than half of non-participants (54.0%) were eligible.

For 2014-15, RIA participants attended the program an average of just over 100 days each, averaging almost ten days in the summer and 76 days during the school year. Participants attended an average of 47 days before school and 81 days after school. Of the children RIA served during the calendar year, nearly six of each ten attended the program for 90 or more days and two-thirds attended regularly. The younger children tended to attend more days than the older children, particularly for total after school days and total RIA attendance for the year.

Comparing school absences and tardies by RIA participation, children who attended RIA after school had more absences than other children in the first quarter only. After the first quarter, afterschool RIA participants' school absences were no different from other children's absences. During the fourth quarter, children who attended the RIA morning program had significantly fewer absences than those who did not attend. For the school year, RIA afterschool participants had more tardies than non-participants. In the fourth quarter and for the year, RIA morning participants had significantly fewer tardies than other children.

Analyses were unable to show any significant influence of RIA participation on discipline referrals.

For academic achievement, RIA participants had significantly lower CBM-R Median WPM Correct, aReading, and mathematics scores than non-participants during the fall quarter. These comparisons suggest that RIA appropriately served children with academic needs. RIA participants gained less from fall to winter in their Composite Scores than non-participants but more in WPM and aReading. Although winter to spring gains were not significantly different by RIA participation, participants gained more than non-participants descriptively in aReading. For math, RIA participants gained significantly more than non-participants from fall to winter. Gains differences were not significantly different by RIA participation from winter to spring or from fall to spring, but RIA participants gained more from fall to spring descriptively. For the school year, children who attended more days of the RIA afterschool program gained significantly more in math from fall to spring.

The small numbers of children with two years of scores on Iowa Assessments made it difficult to make meaningful comparisons between 2014 and 2015 proficiencies. Analyses of RIA participants for 2015 Iowa Assessment proficiencies showed that the summer 2014 RIA program was least helpful to children in becoming proficient in reading and mathematics in 2015. During the school year, children who participated in RIA during each quarter were much more likely to be proficient in both reading and math than those who did not participate during that quarter.

## Summer 2014 Rock-It Academy Program Evaluation Summary

During summer 2014, the Rock-It Academy (RIA) program at Neil Armstrong Elementary served 64 children who had just completed kindergarten through fourth grade. Reading was the main academic focus in RIA. To assess reading progress, RIA used measurements from the end of the school year and compared them with measurements at the end of the program. The school recommended that 19 children attend the summer program who did not attend. For comparison, the school used measurements for these children at the end of the previous school year and the beginning of the new school year, which was just one day after the summer program ended.

Kindergarten children who attended RIA increased their literacy skills in every area, with about half improving in phoneme segmentation fluency and correct letter sounds (CLS). More than one-fourth improved in whole words read (WWR), Developmental Reading Assessment (DRA) scores, and 95 Percent Group phonics reading skills (95%). Kindergarten RIA participants gained more skills over the summer than non-participants in WWR, DRA, and 95%.

RIA first graders improved their scores on all assessments from the end of the school year until the end of summer. The greatest percentages improved on reading comprehension (Retell), followed by WWR and words correct per minute (WCPM). Percentages of children performing at grade level increased in every area from the end of the school year to the end of summer.

RIA second graders improved in all areas at least somewhat, unlike children who did not attend, whose average scores improved only in reading comprehension (Retell) and phonics reading skills. More than one-third of RIA second graders improved their reading quality, but half of those who did not attend also improved. More than half who attended improved in Retell while only one-fourth improved who did not attend. More than eight of each ten participants improved in WCPM and accuracy (ACC) and nine of each ten improved their DRA scores.

RIA third graders had lower initial scores in every area than those who did not participate. Participants decreased the gap by the end of the summer in WCPM, accuracy, and reading skill levels (95%). In all areas except reading comprehension, greater percentages of third graders who participated increased their skills during the summer.

For WCPM, nearly half of RIA fourth graders improved their scores while non-participants declined in this area over the summer. More than one-fourth of participants improved their accuracy over the summer. Fourth grade participants increased all literacy skills at least slightly during the summer with about one in each five improving their reading level skills.

Across all grade levels, children who did not participate in the summer RIA program stayed the same or lost ground toward goals from the end of the school year to the end of summer in PSF, CLS, DRA scores, WCPM, reading accuracy, and quality. RIA participants gained more or lost less ground between the end of the school year and the end of summer than non-participants in every area except reading skill levels and comprehension. Avoiding summer learning loss, participants remained relatively the same or increased their goal attainment in every literacy skills area. At least some participants gained skills during the RIA program in every area, with the smallest percentage gaining in reading quality and the greatest percentage gaining in WWR. More than half the participants gained in every area other than DRA and 95% scores, where nearly one in each three improved during RIA.

Academically, the 2014 summer RIA program was a resounding success. The parents were very appreciative of all that was offered including breakfast, morning math and reading instruction,

RtI, technology time, physical activity, lunch, and social and recreational time in the afternoon with the Bettendorf Parks and Recreation Department. The students were able to meet their “new” teachers in many instances and these students were able to learn more in a smaller 1:12 or 1:15 student/teacher ratio environment. Staff members were all current Neil Armstrong staff and that helped immensely with positive behaviors, routines, and strengthening relationships with students and their families. Our students were able to participate in some wonderful experiential learning trips like Niabi Zoo, Splash Landing, QC Family Entertainment, Park Olympics, etc. They also were able to learn about many other hands-on activities like tie-dying, having a cook out, and playing group or team games.

## Summer 2014 Rock-It Academy Program

During summer 2014, the Rock-It Academy (RIA) program at Neil Armstrong Elementary served 64 children who had just completed kindergarten through fourth grade. The program lasted 30 days and ran from June 16<sup>th</sup>-August 1<sup>st</sup>. The program was not in session the week of June 30-July 4. Breakfast was offered from 8:00-8:30 and then the learning program, including a 15-30 minute recess, ran from 8:30 to 11:45 a.m. A teacher and paraeducator staffed each classroom in the morning and paraeducators supervised breakfast and lunch. Students were offered lunch from 11:45 to 12:15 p.m. RIA bussed the students from school to Edgewood Park in Bettendorf for the Bettendorf Parks and Recreation Summer Playground Program from 12:30-4:00. Two or three RIA staff assisted the Bettendorf Park and Recreation Department staff at the park each afternoon. Families picked up the children at the park or the children walked home after checking out with the 5<sup>th</sup> Quarter Director Becca Eastman.

Grade	K	1	2	3	4	Total
<b>Attendance:</b>	3	0	0	1	0	4
1 to 10 days	25.0%	0.0%	0.0%	25.0%	0.0%	6.3%
11 to 20 days	2	8	6	8	5	29
	16.7%	61.5%	54.5%	57.1%	35.7%	45.3%
21 to 30 days	7	5	5	5	9	31
	58.3%	38.5%	45.5%	35.7%	64.3%	48.4%
Mean # days	14.24	19.14	15.67	13.30	17.47	15.76
Total	12	13	11	14	14	64
	18.8%	20.3%	17.2%	21.9%	21.9%	100.0%

As the table above shows, children in the summer program were relatively evenly balanced by grade level. On average, nearly half the children attended the program for more than 20 of the 30 days. Average days attended was almost 16 days and there were no significant differences in attendance by grade level.

### Academic Progress

Reading was the main academic focus in the summer RIA program. To assess reading progress, RIA used measurements from the end of the school year and compared them with measurements at the end of the program. The school recommended that 19 children attend the summer program who did not attend. For comparison, the school used measurements for these children at the end of the previous school year and the beginning of the new school year, which was just one day after the summer program ended. Teachers used the Dynamic Indicators of Basic Early Learning Skills (DIBELS), DIBELS Oral Reading Fluency (DORF), Developmental Reading Assessment (DRA), and 95 Percent Group phonics reading skills (95%) to measure children's progress at each grade level listed below.

Assessment	K	1	2	3	4
DIBELS Phoneme Segmentation Fluency (PSF)	X				
DIBELS Nonsense Word Fluency – Correct letter sounds (CLS)	X	X			
DIBELS Nonsense Word Fluency – Whole words read (WWR)	X	X			
DORF Words Correct Per Minute (WCPM)		X	X	X	X
DORF Accuracy (ACC)		X	X	X	X
DORF Reading Comprehension (Retell)		X	X	X	X
DORF Reading Quality (Quality)			X	X	X

Assessment	K	1	2	3	4
DRA	X	X	X		
95%	X	X	X	X	X

### Kindergarten Literacy

When children complete kindergarten, grade level scores are as shown below in the “Goal” column. The purpose for the summer program was that children improve their scores from their corresponding scores at the end of the school year.

Assessment	When	Attend RIA?	Range	Mean	N	SD	Goal	% at Goal	% Who Improved
<b>DIBELS PSF</b>	EOY	No	48-64	56.8	5	7.1	40	100%	
		Yes	20-64	46.1	12	15.3	40	66.7%	
	EOS	No	15-53	43.4	5	16.1	40+	80.0%	20.0%
		Yes	30-66	47.2	11	11.7	40+	63.6%	54.5%
<b>DIBELS CLS</b>	EOY	No	15-50	32.6	5	12.5	28	80.0%	
		Yes	15-50	30.7	12	9.8	28	58.3%	
	EOS	No	21-38	29.0	5	7.5	28+	40.0%	60.0%
		Yes	8-37	26.3	11	9.2	28+	54.5%	45.5%
<b>DIBELS WWR</b>	EOY	No	0-9	3.6	5	4.2	0	100%	
		Yes	0-1	0.2	12	0.4	0	100%	
	EOS	No	0-2	0.8	5	1.2	0+	40.0%	20.0%
		Yes	0-5	1.0	11	1.7	0+	36.4%	36.4%
<b>DRA</b>	EOY	No	2-3	2.8	5	0.4	3-4	80.0%	
		Yes	2-3	2.7	12	0.5	3-4+	66.7%	
	EOS	No	2-3	2.8	5	0.4	3-4	80.0%	0.0%
		Yes	2-6	3.2	10	1.1	3-4+	80.0%	30.0%
<b>95%</b>	EOY	No	19-32	27.0	5	5.4	32	20.0%	
		Yes	12-32	23.1	12	6.7	32	16.7%	
	EOS	No	24-32	28.8	5	4.4	32+	60.0%	60.0%
		Yes	12-32	25.6	11	7.7	32+	36.4%	27.3%

**Key:** EOY = end of school year, EOS = end of summer, SD = standard deviation (dispersion or variation of scores).

For Phoneme Segmentation Fluency (PSF), children who attended the summer program had lower average scores at the end of the school year than children recommended for the summer program but who did not attend. By the end of summer, children who attended RIA increased their PSF scores by an average of 1.1 points, while children who did not attend lost an average 13.4 points. The standard deviation demonstrates that scores for children who attended RIA became more similar during the summer while other children’s scores became more dispersed. Two-thirds of the children who attended RIA maintained their PSF skills through the summer, while PSF decreased for children who did not attend. Overall, more than half of the children who attended RIA improved their PSF, but only 20% of those who did not attend improved.

For Correct letter sounds (CLS), children in both categories lost some proficiency over the summer. However, the percentage at grade level decreased only slightly for children who attended RIA while the percentage diminished substantially for those who did not attend. Nearly

half of the children who attended RIA improved CSL proficiency over the summer, but three-fifths of those who did not attend improved as well.

For Whole words read (WWR), scores were substantially lower at the end of the school year for children who attended the summer program than for children who did not. By the end of the summer, children who attended RIA increased their WWR average but those who did not attend reduced their scores considerably. Through the summer, more than one-third of those who attended increased their WWR, compared with only one in five of those who did not attend.

For the Developmental Reading Assessment (DRA), children who did not attend the summer program maintained their skills well, but none improved. Children who did attend RIA improved their average DRA scores and three of each ten improved over the summer. By the end of the summer, children in both groups had the same proficiency levels.

For phonics reading skills (95%), children in both categories improved their skills over the summer. Children who did attend RIA had lower average scores at both assessment points, but they maintained or increased their skills slightly more than those who did not attend. By the end of the summer, more than one-fourth of children who attended RIA had improved, along with three of five who did not attend.

### First Grade Literacy

Assessment	When	Attend RIA?	Range	Mean	N	SD	Goal	% at Goal	% Who Improved
<b>DIBELS CLS</b>	EOY	Yes	18-94	46.6	13	20.4	58	23.1%	
	EOS	Yes	19-82	50.0	13	19.6	28+	30.8%	61.5%
<b>DIBELS WWR</b>	EOY	Yes	3-28	12.5	13	7.2	13	46.2%	
	EOS	Yes	6-25	14.9	13	6.8	13+	61.5%	76.9%
<b>WCPM</b>	EOY	Yes	7-75	35.4	13	18.5	47	23.1%	
	EOS	Yes	7-79	42.5	13	21.2	47+	46.2%	69.2%
<b>ACC</b>	EOY	Yes	48-99	80.9	13	16.9	90	46.2%	
	EOS	Yes	50-100	85.2	13	13.9	90+	53.8%	61.5%
<b>Retell</b>	EOY	Yes	0-29	12.4	13	10.4	15	30.8%	
	EOS	Yes	5-40	22.8	13	10.2	15+	84.6%	84.6%
<b>DRA</b>	EOY	Yes	3-30	12.4	13	6.6	18-20	15.4%	
	EOS	Yes	6-30	15.6	10	6.4	18-20	23.1%	50.0%
<b>95%</b>	EOY	Yes	20-32	27.4	13	6.1	32	61.5%	
	EOS	Yes	20-37	30.8	12	6.1	32+	83.3%	33.3%

**Key:** EOY = end of school year, EOS = end of summer, SD = standard deviation (dispersion or variation of scores).

When children complete first grade, grade level scores are as shown above in the “Goal” column. RIA only recorded end of summer scores for one first grader who did not attend the program, so the attended/did not attend comparisons are not given for first grade.

On average, first graders improved their scores on all assessments from the end of the school year until the end of summer. The greatest percentages improved on reading comprehension

(Retell), followed by whole words read (WWR) and words correct per minute (WCPM). Percentages of children performing at grade level increased in every area from the end of the school year to the end of summer. First graders improved least in reading skill levels (95%), but more than eight of each ten were at grade level by the end of summer. All children maintained their reading skill levels (95%) and DRA scores from the end of the school year. One-third improved their skill levels and half improved their DRA scores. For all other assessments, at least six of each ten first graders improved through the summer.

### Second Grade Literacy

Assessment	When	Attend RIA?	Range	Mean	N	SD	Goal	% at Goal	% Who Improved
WCPM	EOY	No	38-103	70.3	4	33.0	87	50.0%	
		Yes	31-106	65.9	11	24.4	87	18.2%	
	EOS	No	41-77	54.5	4	15.8	87+	0.0%	25.0%
		Yes	25-118	68.8	11	24.5	87+	18.2%	81.8%
ACC	EOY	No	88-99	95.0	4	4.8	97	50.0%	
		Yes	87-100	94.3	11	3.7	97	9.1%	
	EOS	No	86-96	92.3	4	4.3	97+	0.0%	25.0%
		Yes	88-100	95.3	11	3.5	97+	45.5%	81.8%
Retell	EOY	No	21-57	40.5	4	16.2	27	75.0%	
		Yes	10-54	29.1	11	13.9	27	54.5%	
	EOS	No	31-65	44.8	4	14.8	27+	100%	25.0%
		Yes	11-60	33.1	11	13.9	27+	72.7%	54.5%
Quality	EOY	No	2-4	3.0	4	0.8	2	100%	
		Yes	1-4	2.0	11	1.0	2	63.6%	
	EOS	No	2-3	2.3	4	0.5	2+	75.0%	50.0%
		Yes	1-3	2.1	11	0.7	2+	81.8%	36.4%
DRA	EOY	No	16-28	22.5	4	6.4	28-30	50.0%	
		Yes	14-28	18.6	11	4.2	28-30	9.1%	
	EOS	No	16-28	22.5	4	6.4	28-30+	50.0%	0.0%
		Yes	14-28	22.5	10	5.1	58-30+	18.2%	90.0%
95%	EOY	No	32-57	44.5	4	14.4	57	50.0%	
		Yes	14-57	38.5	8	13.8	57	18.2%	
	EOS	No	32-57	50.8	4	12.5	57+	75.0%	25.0%
		Yes	14-61	39.8	8	14.7	57+	18.2%	18.2%

Second graders who attended the RIA summer program improved each of their average assessment scores at least somewhat over the summer, unlike children who did not attend, whose average comprehension (Retell) and reading skills (95%) scores increased, but whose DRA scores remained the same and all other scores declined. Nearly one in five who attended improved their reading skills over the summer, but one in four who did not attend improved as well. More than one-third second graders who attended improved their reading quality, but half

of those who did not attend also improved. More than half who attended improved in reading comprehension while only one-fourth improved who did not attend. More than eight of each ten who attended improved in fluency (WCPM) and accuracy (ACC) and nine of each ten improved their DRA scores.

### Third Grade Literacy

When children complete third grade, grade level scores are as shown in the “Goal” column.

Assessment	When	Attend RIA?	Range	Mean	N	SD	Goal	% at Goal	% Who Improved
WCPM	EOY	No	57-115	95.2	6	22.2	100	50.0%	
		Yes	14-106	56.7	12	26.6	100	8.3%	
	EOS	No	56-111	88.6	5	23.1	100+	33.3%	40.0%
		Yes	25-112	62.9	12	28.2	100+	16.7%	83.3%
ACC	EOY	No	89-100	95.8	6	22.2	97	50.0%	
		Yes	56-99	86.4	11	12.4	97	8.3%	
	EOS	No	90-99	95.4	5	3.4	97+	33.3%	60.0%
		Yes	83-98	92.7	12	97+	97+	25.0%	90.9%
Retell	EOY	No	27-53	35.8	6	11.6	30	50.0%	
		Yes	11-52	26.5	12	12.6	30	33.3%	
	EOS	No	44-56	50.2	5	5.5	30+	100%	80.0%
		Yes	12-51	29.1	12	14.5	30+	41.7%	50.0%
Quality	EOY	No	1-3	2.2	6	00.8	3	33.3%	
		Yes	1-3	1.7	12	0.8	3	16.7%	
	EOS	No	1-2	1.8	5	0.4	3+	0.0%	0.0%
		Yes	1-3	1.5	12	0.7	3+	8.3%	8.3%
95%	EOY	No	37-71	59.7	3	19.6	75	0.0%	
		Yes	32-75	55.4	11	20.8	75	45.5%	
	EOS	No	37-72	60.0	3	19.9	75	0.0%	33.3%
		Yes	32-75	59.3	11	17.1	75	45.5%	45.5%

**Key:** EOY = end of school year, EOS = end of summer, SD = standard deviation (dispersion or variation of scores).

Third graders who participated in the summer RIA program had lower initial scores in every area than those who did not participate. Participants did decrease the gap by the end of the summer in fluency (WCPM), accuracy (ACC), and reading skill levels (95%). Non-participants increased their scores more during the summer than participants in comprehension (Retell) and both categories declined during the summer in quality. In all areas except comprehension, greater percentages of third graders who participated increased their skills during the summer.

### Fourth Grade Literacy

When children complete fourth grade, grade level scores are as shown in the “Goal” column.

Assessment	When	Attend RIA?	Range	Mean	N	SD	Goal	% at Goal	% Who Improved
WCPM	EOY	No	122-148	133.0	3	13.5	115	100%	
		Yes	65-170	125.8	13	30.5	115	69.2%	
	EOS	No	113-145	124.3	3	17.9	115+	66.7%	0.0%
		Yes	68-166	125.0	13	26.5	115+	53.8%	46.2%
ACC	EOY	No	94-99	97.3	3	2.9	98	66.7%	
		Yes	89-100	97.2	13	3.4	98	76.9%	
	EOS	No	97-100	98.7	3	1.5	98+	66.7%	66.7%
		Yes	96-99	98.3	13	1.2	98+	76.9%	76.9%
Retell	EOY	No	26-59	39.3	3	17.4	33	66.7%	
		Yes	15-116	42.8	13	26.5	33	69.2%	
	EOS	No	29-52	43.3	3	12.5	33+	66.7%	66.6%
		Yes	14-84	51.9	13	21.7	33+	84.6%	76.9%
Quality	EOY	No	2-3	2.7	3	0.6	3	66.7%	
		Yes	2-4	2.5	13	0.7	3	46.2%	
	EOS	No	2-2	2.0	3	0.0	3+	0.0%	0.0%
		Yes	1-3	2.0	13	0.6	3+	23.1%	7.7%
95%	EOY	No	--	--	--	--	--	--	
		Yes	37-75	65.4	11	14.1	75	54.5%	
	EOS	No	--	--	--	--	--	--	--
		Yes	37-75	66.9	12	12.8	75	59.3%	18.2%

**Key:** EOY = end of school year, EOS = end of summer, SD = standard deviation (dispersion or variation of scores).

For fluency (WCPM), fourth grade RIA participants had nearly the same average scores at the end of school and the end of the summer, but nearly half did improve their scores while non-participants declined in this area over the summer. There is little difference among accuracy scores at the end of the school year and the end of the summer for either participants or non-participants, but more than one-fourth of participants did improve their accuracy over the summer. Both participants and non-participants improved their reading comprehension (Retell) over the summer and lost ground in their quality scores. Only one set of non-participant reading skill scores was available, so this set is not presented in the table above. Participants increased these skills slightly during the summer and nearly one in five improved their skills.

### Overall Literacy Gains

Gains	RIA participant?	N	Mean	Std. Dev.	EOY At goal	End of Summer	
						At goal	% who gained
PSF	No	5	-13.4000	17.47284	100%	80.0%	20.0%
	Yes	11	2.7273	14.19219	66.7%	63.6%	54.5%
CLS	No	6	-2.0000	12.66491	66.7%	33.3%	66.7%
	Yes	24	-0.1667	13.11377	40.0%	41.7%	54.2%
WWR	No	6	-1.1667	5.91326	---	---	66.7%
	Yes	24	1.6667	4.22895	46.2%	60.0%	83.3%
DRA	No	10	0.2000	.63246	60.0%	60.0%	10.0%
	Yes	30	0.8333	1.72374	30.6%	40.0%	30.0%
95%	No	14	3.7857	7.76757	28.6%	50.0%	42.9%
	Yes	53	2.6226	4.76456	42.6%	51.9%	30.2%
WCPM	No	13	-7.2308	16.95167	57.1%	38.5%	38.5%
	Yes	49	3.6327	9.77602	32.7%	38.8%	69.4%
ACC	No	13	-6.6154	22.69192	57.1%	30.8%	46.2%
	Yes	48	3.0833	6.87528	37.5%	51.0%	64.6%
Retell	No	13	10.1538	12.36828	64.3%	92.3%	76.9%
	Yes	49	6.6939	15.60075	46.9%	69.4%	67.3%
Quality	No	12	-0.5000	.67420	72.7%	33.3%	0.0%
	Yes	36	-0.2222	.79682	39.1%	36.1%	16.7%

Across all grade levels, children who did not participate in the summer RIA program stayed the same or lost ground toward goals from the end of the school year to the end of summer in phoneme segmentation fluency (PSF), correct letter sounds (CLS), Developmental Reading Assessment (DRA) scores, words correct per minute (WCPM), reading accuracy (ACC), and reading quality. Somehow, non-participants managed to increase their goal attainment over the summer in reading skill levels (95%) and reading comprehension (Retell), but it is unknown whether they participated in some other academic program over the summer. At least some percentage of non-participants did increase their scores from the end of the school year until the end of the summer in all areas except reading quality.

Comparing average (mean) scores by RIA participation, participants gained more or lost less ground between the end of the school year and the end of summer than non-participants in every area except reading skill levels (95%) and reading comprehension (Retell). Avoiding the notorious summer learning loss, participants remained relatively the same or increased their goal attainment in every literacy skills area. At least some participants gained skills during the RIA program in every area, with the smallest percentage (one in six) gaining in reading quality and the greatest percentage (more than eight of each ten) gaining in whole words read (WWR). More than half the RIA participants gained in every area other than DRA and 95% scores, where nearly one in each three improved during RIA.

### 2014-2015 Rock-It Academy (RIA) Evaluation

Over the year beginning in summer 2014 and ending in spring 2015, RIA served 136 K-5 children at Neil Armstrong Elementary School (NA) in the Bettendorf Community School District (BCSD). This was nearly half (45.5%) of the children at NA. In summer 2014, RIA served 64 children. During the school year, 85 attended the morning RIA program, 72 attended the afterschool program, and 62 attended both before and after school. Twenty-four children attended RIA both in summer 2014 and during the 2014-15 school year.

NA Demographics		No RIA	RIA	Total NA
Grade level	K	28 (17.2%)	24 (17.8%)	52 (17.4%)
	1	31 (19.0%)	26 (19.3%)	67 (19.1%)
	2	25 (15.3%)	24 (17.8%)	49 (16.4%)
	3	26 (16.0%)	19 (14.1%)	45 (15.1%)
	4	24 (14.7%)	21 (15.6%)	45 (15.1%)
	5	29 (17.8%)	21 (15.6%)	50 (16.8%)
	Females	70 (42.9%)	59 (43.4%)	129 (43.1%)
	Males	93 (57.1%)	77 (56.6%)	170 (56.9%)
	American Indian	0 (0.0%)	2 (1.5%)	2 (0.7%)
	Asian	3 (1.8%)	0 (0.0%)	3 (1.0%)
	Black	13 (8.0%)	16 (11.8%)	29 (9.7%)
	Hispanic	12 (7.4%)	14 (10.3%)	26 (8.7%)
	Multi-racial	10 (6.1%)	13 (9.6%)	23 (7.7%)
	Other	0 (0.0%)	1 (0.7%)	1 (0.3%)
	White	125 (76.7%)	82 (60.3%)	207 (69.2%)
	Special Education	6 (3.7%)	21 (15.6%)	27 (9.1%)
Lunch status:	Full	75 (46.0%)	44 (32.4%)	119 (39.8%)
	Free or reduced	88 (54.0%)	92 (67.6%)	180 (60.2%)

The table above presents the children’s grade level, gender, race/ethnicity, special education designation, and lunch status as recorded by the BCSD. As the table shows, RIA participants were very similar to other NA children by grade level and gender, but RIA participants were more likely than other children to be non-white and have an IEP. Six of each ten RIA participants (60.2%) were eligible for free or reduced cost lunches, while slightly more than half of non-participants (54.0%) were eligible.

For 2014-15, RIA participants attended the program an average of just over 100 days each, averaging almost ten days in the summer and 76 days during the school year. Participants attended an average of 47 days before school and 81 days after school. The columns in the table below are based on 21<sup>st</sup> Century Community Learning Centers attendance categories, which consider more than 30 days in a year as “regular attendance.” Of the children RIA served during the calendar year, nearly six of each ten (57.4%) attended the program for 90 or more days and two-thirds (65.4%) attended “regularly.”

Total RIA Days				
	Average	#	Minimum	Maximum
Q1 AM	4.93	136	0	21
Q2 AM	13.94	136	0	51
Q3 AM	14.64	136	0	49
Q4 AM	13.88	136	0	47
AM total	47.39	136	0	164
Q1 PM	17.324	136	0	41
Q2 PM	19.765	136	0	44
Q3 PM	23.324	136	0	49
Q4 PM	20.993	136	0	46
PM total	81.404	136	0	179
Summer	9.62	136	0	30
Total	100.4412	136	2	203

The table below further describes RIA participants' program attendance. None of the children whose overall attendance was less than 60 days attended after school; all of their attendance was in the summer and before school. All children in the afterschool program attended for at least 60 days during the year. This suggests that the children who attended after school liked the program enough to attend frequently. After school attendance increased after the first quarter, as can be expected for the first year of a new 21<sup>st</sup> CCLC afterschool program.

RIA Days	1 to 29 days				30 to 59 days				60 to 89 days				90 or more days			
	Avg.	#	Min	Max	Avg.	#	Min	Max	Avg.	#	Min	Max	Avg.	#	Min	Max
Q1 AM	.74	47	0	13	4.75	8	0	19	.33	3	0	1	7.64	78	0	21
Q2 AM	.94	47	0	10	3.75	8	0	12	16.67	3	5	28	22.72	78	0	51
Q3 AM	.19	47	0	5	10.63	8	0	37	20.00	3	17	25	23.55	78	0	49
Q4 AM	.04	47	0	2	7.75	8	0	40	24.33	3	20	29	22.45	78	0	47
AM total	1.91	47	0	17	26.88	8	0	52	61.33	3	42	77	76.36	78	0	164
Q1 PM	0.00	47	0	0	0.00	8	0	0	0.00	3	0	0.0	30.21	78	0	41
Q2 PM	0.00	47	0	0	0.00	8	0	0	4.00	3	0	12.0	34.31	78	0	44
Q3 PM	0.00	47	0	0	0.00	8	0	0	10.33	3	0	31.0	40.27	78	0	49
Q4 PM	0.00	47	0	0	0.00	8	0	0	6.33	3	0	19.0	36.36	78	0	46
PM total	0.00	47	0	0	0.00	8	0	0	20.67	3	0	62.0	141.14	78	0	179
Summer	15.83	47	0	28	11.25	8	0	30	0.00	3	0	0	6.08	78	0	30
Total	17.38	47	2	28	38.13	8	30	52	68.00	3	62	77	158.13	78	97	203

On average, boys attended more days of the summer 2014 program than girls (average days 11.4 for boys and 7.3 for girls,  $p = .03$ ). Otherwise, there were no significant differences in RIA attendance by gender or race. There were significant differences in RIA attendance by grade level after school and for total number of RIA attendance days. As shown below, the younger children tended to attend more days than the older children, particularly for total after school days and total RIA attendance for the year.

	Q1 Afterschool Attendance				Q2 Afterschool Attendance			
Grade	#	Average	Min	Max	#	Average	Min	Max
K	24	27.917	0.0	40.0	24	31.833	0.0	43.0
1	27	21.148	0.0	41.0	27	23.074	0.0	44.0
2	24	16.667	0.0	41.0	24	18.417	0.0	44.0
3	19	17.842	0.0	41.0	19	20.105	0.0	44.0
4	21	10.952	0.0	39.0	21	14.190	0.0	42.0
5	21	6.952	0.0	40.0	21	8.524	0.0	44.0
Total	136	17.324	0.0	41.0	136	19.765	0.0	44.0
	Q3 Afterschool Attendance				Q4 Afterschool Attendance			
Grade	#	Average	Min	Max	#	Average	Min	Max
K	24	36.792	0.0	48.0	24	35.042	0.0	46.0
1	27	26.037	0.0	49.0	27	24.222	0.0	46.0
2	24	22.667	0.0	49.0	24	20.333	0.0	46.0
3	19	23.789	0.0	49.0	19	20.895	0.0	45.0
4	21	18.286	0.0	47.0	21	14.048	0.0	40.0
5	21	9.810	0.0	48.0	21	8.571	0.0	44.0
Total	136	23.324	0.0	49.0	136	20.993	0.0	46.0
	Total Afterschool				Total RIA Attendance			
Grade	#	Average	Min	Max	#	Average	Min	Max
K	24	131.583	0.0	177.0	24	132.6667	2.00	177.00
1	27	94.481	0.0	178.0	27	120.5926	5.00	203.00
2	24	78.083	0.0	179.0	24	99.0417	12.00	200.00
3	19	82.632	0.0	174.0	19	108.6842	3.00	196.00
4	21	57.476	0.0	158.0	21	76.0952	3.00	174.00
5	21	33.857	0.0	168.0	21	56.1905	11.00	197.00
Total	136	81.404	0.0	179.0	136	100.4412	2.00	203.00

RIA attendance was significantly different by lunch status for the first quarter of the morning program only. During the first quarter of the morning program, children eligible for free or reduced cost lunch attended fewer days of RIA on average (4.07 days) than other children (6.73 days). After the first quarter of the morning program, in summer 2014, consistently after school, and for all RIA program days, there were no significant differences in RIA attendance by lunch status.

During the summer, children with an IEP attended more than twice the average number of program days than those without an IEP. Before and after school, children with IEPs attended significantly fewer days than others ( $p = .000$ ).

Special Education		Q1 AM	Q2 AM	Q3 AM	Q4AM	AM Total	Summer
No IEP	Average	5.72	16.32	17.23	16.38	55.65	8.18
	N	114	114	114	114	114	114
	Minimum	0	0	0	0	0	0
	Maximum	21	51	49	47	164	30
IEP	Average	.81	1.67	1.29	.95	4.71	17.86
	N	21	21	21	21	21	21

Special Education		Q1 AM	Q2 AM	Q3 AM	Q4AM	AM Total	Summer
	Minimum	0	0	0	0	0	0
	Maximum	12	30	26	20	88	28
Total	Average	4.96	14.04	14.75	13.98	47.73	9.69
	N	136	136	136	136	136	136
	Minimum	0	0	0	0	0	0
	Maximum	21	51	49	47	164	30
		Q1 PM	Q2 PM	Q3 PM	Q4 PM	PM Total	Total days
No IEP	Average	19.333	22.053	26.061	23.526	90.974	110.3684
	N	114	114	114	114	114	114
	Minimum	.0	.0	.0	.0	.0	2.00
	Maximum	41.0	44.0	49.0	46.0	179.0	203.00
IEP	Average	5.714	6.857	7.381	6.286	26.238	44.2381
	N	21	21	21	21	21	21
	Minimum	.0	.0	.0	.0	.0	3.00
	Maximum	39.0	43.0	46.0	41.0	169.0	190.00
Total	Average	17.215	19.689	23.156	20.844	80.904	100.0815
	N	136	136	136	136	136	136
	Minimum	.0	.0	.0	.0	.0	2.00
	Maximum	41.0	44.0	49.0	46.0	179.0	203.00

**Methods note:** The abbreviation “p” in this document is the notation for probability. The probability values in this document represent the degree of certainty that the results reported are not due to chance. For example, a statement above says, “Before and after school, children with IEPs attended significantly fewer days than others ( $p = .000$ ).” This does not necessarily mean that the result is perfect and absolute, because almost nothing is that certain in social research. The actual p-value could be .000359864, leaving some chance for error. Another statement said, “On average, boys attended more days of the summer 2014 program than girls (average days 11.4 for boys and 7.3 for girls,  $p = .03$ ).” Given those average attendance days by gender, the evaluator used a statistical test that included probability analysis to report that this difference is almost certainly not due to chance, such as how far the children live from their schools or the number of days of bad weather during the year.

To clarify, suppose the average attendance days by gender were both 10.0. In that case, there would be no difference at all, the p-value would have approached 1.00, and the evaluator could not have reported that there was an attendance difference by gender. What if the male average were 10.06 and the female average were 9.99? The statistical test for this comparison might have reported that “ $p = 0.72$ .” Averages would be different in absolute terms, but there is a 72% probability that this outcome was due to chance and it would be inappropriate to say that the difference was “significant.” As shown above, the attendance difference by gender p-value indicates that there is a 3.0% probability that this result is due to chance. It is still quite certain that this is a significant relationship, but not as certain as if the analysis reported  $p = .000$ . In this report, the evaluator uses the “ $p = .05$ ” level to identify “significant” changes and differences. If the statistical tests report more than a 5% probability that the outcome is due to chance, this document does not report that outcome as “significant.”

## 2014-15 School Attendance

The table below displays the average days of absences from school and tardies by whether or not children participated in RIA. For the first quarter only, RIA participants had significantly more absences than non-participants ( $p = .049$ ). After the first quarter, there were no significant differences in absences or tardies by RIA participation. The substantial difference between participant and non-participant standard deviations suggests that just a few children may have been responsible for the significant difference. School year attendance and tardies information was not available for children who attended the summer 2014 program only.

	RIA	#	Mean	Std. Deviation
Q1 absences	No	158	1.14	1.459
	Yes	124	1.56	1.935
Q1 tardies	No	158	.54	1.001
	Yes	124	.81	1.666
Q2 absences	No	158	2.54	2.423
	Yes	124	2.87	2.406
Q2 tardies	No	158	1.08	2.016
	Yes	124	1.38	2.177
Q3 absences	No	157	1.69	1.970
	Yes	124	1.82	2.358
Q3 tardies	No	157	1.35	2.710
	Yes	124	1.24	2.162
Q4 absences	No	157	2.04	2.467
	Yes	124	2.10	2.588
Q4 tardies	No	157	1.69	3.667
	Yes	124	2.00	3.450
SY absences	No	158	7.38	6.087
	Yes	124	8.35	6.393
SY tardies	No	158	4.65	7.654
	Yes	124	5.43	7.540

Multiple regression is a statistical analysis method that provides the probability that a variable of interest influences an outcome, controlling for other variables that may influence that outcome. Research has often demonstrated that variables influencing academic and school behavior outcomes include grade level, gender, race, poverty (lunch status), and disability (presence of an Individualized Education Plan). Regression enables testing of whether the variable of interest (days of RIA participation) influences the outcome of interest (school attendance in these analyses) while controlling for other possible influences (the list above). In reporting the results of the multiple regressions, an “r-squared” value is given for each analysis. The r-squared value is the part of the variation in the dependent variables (unexcused and excused absences and tardies in this section of the report) explained by the combined influence of the predictors. In other words, the r-squared value indicates how much difference the predictors make in the dependent variables. Unstandardized regression coefficients (B) are presented for each

regression analysis. These coefficients allow the reader to compare the influence of each predictor across regression analyses, but *not* within each regression. Only significant coefficients are displayed.

For absences, children in the lower grades had significantly more than children in the upper grades in the second and third quarters only, perhaps because these quarters include the worst winter weather. They also had more absences for the school year. Absences were never significantly different by gender. For the first three quarters, children of color had more absences than white children, but this difference disappeared in the fourth quarter. After the first quarter and for the school year, children eligible for free or reduced cost lunches had more absences than other children and this difference increased over the year. In the spring and for the year, children with IEPs had more absences than other children. Controlling for all these factors, children with more days of RIA afterschool attendance had more absences than other children in the first quarter only. In the fourth quarter, RIA morning participants had fewer absences than other children. Otherwise, these analyses failed to demonstrate any independent effect of RIA attendance on school attendance.

2013-2014	Absences					Tardies					
	Quarter	1	2	3	4	SY	1	2	3	4	SY
Grade level	---	-.193	-.182	---	---	-.476	---	---	---	---	---
Female	---	---	---	---	---	---	---	---	---	---	---
White	-.599	-.902	-.603	---	---	-2.168	-.481	-.628	---	---	-2.133
Lunch status	---	.602	.536	.802	---	2.210	.529	.729	.905	.464	2.959
IEP	---	---	1.150	1.071	---	3.052	1.069	---	---	2.351	4.571
RIA AM days	---	---	---	-.116	---	---	---	---	---	-.137	-.049
RIA PM days	.022	---	---	---	---	---	---	---	---	---	.018
R <sup>2</sup>	.065	.078	.086	.086	---	.105	.171	.121	.091	.120	.160

For tardies, neither the grade level nor gender had any significant influence. White children had fewer tardies than children of color for the first two quarters and for the year. Children eligible for free and reduced cost lunches had more tardies than other children in every comparison. Those with IEPs had more tardies than those without IEPs except in the second and third quarters. Controlling for all these factors, RIA afterschool participants had more tardies than other children for the school year. However, children who attended more days of the RIA morning program had fewer tardies in the fourth quarter and for the year.

### Discipline Referrals

The purpose of analyzing discipline referrals is to test whether RIA participation reduces disorder and violence in the school. Over the school year at Neil Armstrong, the number of children with discipline referrals increased each quarter over the school year as is typical. For the year, more than one in four children at NA (28.1%) had from one to 33 discipline referrals.

When	# of Children	Maximum Referrals Each
Q1	29	11
Q2	42	8
Q3	44	13
Q4	47	15
SY	82	33

The table below compares referrals by RIA participation. Descriptively, RIA participants had a higher average number of referrals than non-participants but none of the differences are statistically significant.

2014-2015 Discipline Referrals				
	RIA	N	Mean	Std. Deviation
Q1	No	163	.24	1.047
	Yes	129	.29	1.330
Q2	No	163	.28	1.003
	Yes	129	.39	1.201
Q3	No	163	.31	1.009
	Yes	129	.43	1.545
Q4	No	163	.39	1.517
	Yes	129	.45	1.375
SY	No	163	1.23	3.434
	Yes	129	1.56	4.628

Clearly, factors other than RIA attendance can influence discipline referrals, so this analysis used multiple regression to examine other effects on discipline referrals. As described above, multiple regression allows consideration of the simultaneous combined influence of multiple predictors on an outcome. Unstandardized regression coefficients are presented for each regression analysis, allowing the reader to compare the influence of each predictor across regression analyses, but *not* within each regression. Again, the table presents only statistically significant coefficients; “---“ indicates that the factor had no effect on the outcome of that analysis.

2014-2015 Discipline Referrals					
Quarter	1	2	3	4	SY
Grade level	---	---	---	---	---
Female	-.323	-.383	-.381	-.391	-1.480
White	-.325	---	---	---	---
Lunch status	---	---	---	---	.974
IEP	---	---	----	---	----
RIA AM days	---	---	---	---	---
RIA PM days	---	---	---	---	---
Summer RIA	---	---	---	---	---
R <sup>2</sup>	.055	.054	.050	.054	.071

The analyses presented above show that grade level and disability do not influence discipline referrals significantly. For every comparison, boys have significantly more referrals than girls. Children of color have more referrals than white children in the first quarter only and those eligible for free or reduced lunch have more referrals than other children over the school year. Controlling for these factors, RIA attendance has no significant influence on discipline referrals.

## Academic Proficiency

As measures of academic proficiency, Neil Armstrong assessed children in reading and mathematics in September/October, January, and May. The reading assessments consisted of those shown with their benchmarks in the table below. For kindergarten and first grade, “composite scores” included letter names and sounds, sight words, and reading a passage for one minute. CMB-R is a measure of reading fluency and aReading scores measure reading comprehension.

Benchmarks	Grade	K	1	2	3	4	5
Fall Overall	Composite Score	40	28				
	CBM-R Median WPM Correct			55	87	127	127
	aReading Scaled Score		428	462	481	493	501
Winter Overall	Composite Score	47	37				
	CBM-R Median WPM Correct			83	115	141	141
	aReading Scaled Score	415	451	479	489	497	510
Spring Overall	Composite Score	56	51				
	CBM-R Median WPM Correct			96	129	157	154
	aReading Scaled Score	418	458	480	489	500	511
Fall to Spring Change	Composite score	16	23				
	CBM-R WPM Correct			41	41	30	27
	aReading Scaled Score	3	30	18	8	7	10

The table below compares fall reading assessment scores for children who did and did not participate in RIA during the first fall quarter. Descriptively, RIA participants scored higher on their fall Composite Scores than non-participants, but this difference was not statistically significant. For the fall WPM and aReading scores, RIA participants scored significantly lower than non-participants ( $p = .028$  for WPM and  $p = .002$  for aReading). These comparisons suggest that RIA appropriately served children with academic needs.

Fall 2014 Reading Assessments				
	RIA?	#	Average	Std. Deviation
Composite Score	No	60	34.383	10.6645
	Yes	38	38.263	10.7620
CBM-R WPM Correct	No	132	109.250	50.3624
	Yes	38	88.579	49.7011
aReading Scaled Score	No	164	485.116	35.0133
	Yes	55	467.745	36.0233

The table below confirms that RIA served children with academic needs beginning in fall 2014, except that the 23 kindergarten RIA participants had higher average Composite Scores than the 27 non-participants. RIA kindergarten participants were already meeting the Composite benchmark but non-participants were not.

Fall 2014 Reading Assessments						
	No RIA Q1 Participation			RIA Q1 Participation		
Grade	Composite	WPM	aReading	Composite	WPM	aReading
K	37.556 (27)			42.043 (23)		

1	33.167 (24)		444.125 (24)	30.833 (24)		435.500 (24)
2		94.208 (24)	484.417 (24)		55.826 (23)	462.217 (23)
3		109.542 (24)	494.417 (24)		81.500 (16)	481.438 (16)
4		100.435 (23)	493.522 (23)		73.556 (18)	475.778 (18)
5		172.269 (26)	525.846 (26)		137.250 (16)	515.353 (17)
All	35.490 (51)	120.402 (97)	489.041(121)	36.319 (47)	83.671 (73)	470.520 (98)

The next table below compares winter reading assessments by RIA participation during the second fall quarter. As shown, RIA participants again had Composite Scores that were not significantly different from non-participants' scores. None of the comparisons in the table below is statistically significant, so winter assessments and gains from fall to winter were the same by RIA participation. Descriptively, RIA participants gained less in their Composite Scores than non-participants but more in WPM and aReading.

<b>Winter 2015 Reading Assessments</b>				
	<b>RIA?</b>	<b>#</b>	<b>Average</b>	<b>Std. Deviation</b>
Composite Score	No	58	47.569	12.4494
	Yes	41	47.390	14.1631
Fall to winter Composite score gains	No	56	13.1071	9.16253
	Yes	41	10.0732	8.69882
CBM-R WPM Correct	No	127	130.197	48.9263
	Yes	46	113.674	54.0938
Fall to winter WPM score gains	No	125	21.0560	15.61807
	Yes	45	22.4667	15.56891
aReading Scaled Score	No	182	485.330	41.7124
	Yes	87	469.874	39.9802
Fall to winter aReading score gains	No	152	12.9474	13.52299
	Yes	66	13.7879	14.95482

The next table compares spring reading assessment scores by RIA participation in the third quarter. In the spring, RIA participants had Composite Scores not significantly different from non-participants scores, but participants' WPM and aReading scores were significantly lower than non-participants' scores. Although winter to spring gains were not significantly different by RIA participation, participants gained more than non-participants descriptively in aReading.

<b>Spring 2015 Reading Assessments</b>				
	<b>RIA?</b>	<b>#</b>	<b>Average</b>	<b>Std. Deviation</b>
Composite Score	No	60	56.167	13.4872
	Yes	40	55.275	16.0240
Winter to spring Composite score gains	No	59	8.4576	9.60482
	Yes	40	8.4500	9.04958
CBM-R WPM Correct	No	129	140.891	49.7243
	Yes	45	121.222	49.8360
Winter to spring WPM score gains	No	128	10.7734	14.95095
	Yes	45	7.3556	13.72979
aReading Scaled Score	No	189	494.624	37.3837
	Yes	85	481.800	33.4414

Spring 2015 Reading Assessments				
	RIA?	#	Average	Std. Deviation
Winter to spring aReading score gains	No	184	10.2337	12.45121
	Yes	85	11.6941	15.93590

The school also assessed mathematics achievement in fall, winter, and spring. The table below compares the assessments by RIA participation for the school year. RIA participants had significantly lower math scores at all three assessments than non-participants. The fall difference confirms that RIA served children with academic needs. However, RIA participants gained significantly more than non-participants from fall to winter. Gains differences were not significantly different by RIA participation from winter to spring or from fall to spring, but RIA participants gained more from fall to spring descriptively.

2014-15 Mathematics Assessments				
	RIA?	#	Average	Std. Deviation
Fall	No	156	201.49	14.754
	Yes	126	196.77	12.557
Winter	No	154	204.47	14.006
	Yes	123	200.52	11.118
Spring	No	152	209.01	14.592
	Yes	122	204.16	11.366
Fall to winter gains	No	150	2.8533	4.46821
	Yes	123	4.0650	5.38477
Winter to spring gains	No	148	4.6824	3.96419
	Yes	121	3.7851	4.19167
Fall to spring gains	No	149	7.5369	5.15768
	Yes	121	7.9339	5.34904

Factors other than RIA attendance can influence academic achievement, so this analysis used multiple regression to examine overall effects. As described above, multiple regression allows consideration of the simultaneous combined influence of multiple predictors on an outcome. Unstandardized regression coefficients are presented for each regression analysis, allowing the reader to compare the influence of each predictor across regression analyses, but *not* within each regression. The table above presents the results of the academic regression analyses.

2014-2015 Mathematics Assessments and Gains						
Assessment	Fall	Winter	F-W gain	Spring	W-S gain	F-S gain
Grade level	6.883	6.515	-.374	6.795	---	---
Female	---	---	---	---	---	---
White	3.091	2.961	---	3.136	---	---
Lunch status	---	-2.814	---	-2.911	---	---
IEP	-6.637	-6.132	---	-8.624	-2.475	---
RIA AM days	---	---	---	---	---	---
RIA PM days	---	---	---	---	---	.031
R <sup>2</sup>	.726	.765	.038	.777	.045	.039

For reading, regression analyses were not able to show a positive influence of RIA participation (results not shown). For math, RIA participation did have some positive influence.

As expected, children in the upper grades had higher scores on the math assessments than children in the lower grades overall, but children in the lower grades gained significantly more between fall and winter than children in the upper grades. Gender did not significantly influence math assessment results. White children had higher scores on all three assessments than children of color, but there were no significant differences in gains by race/ethnicity. Children eligible for free or reduced cost lunch had significantly lower scores than their peers on the winter and spring assessments, but there were no significant differences in gains by lunch status. Children with IEPs had significantly lower scores than their peers on all three assessments, but they gained as much between fall and winter and from fall to spring as their peers did.

Controlling for all these factors known to influence academic achievement, days of RIA participation did not significantly influence any scores or gains, except that children who attended more days of the RIA afterschool program gained significantly more in math from fall to spring.

### 2014 to 2015 Iowa Assessment Scores Analysis

Neil Armstrong Elementary provided 2014 and 2015 Iowa Assessment scores for students in grades 3 through 5, except that the District did not use Iowa Assessments for third grade reading in 2014. The table below presents the distribution of proficiencies for all students who took the Iowa Assessments comparing 2014 and 2015 reading, mathematics, and science for the two years.

IA	Reading				Mathematics				Science			
	2014		2015		2014		2015		2014		2015	
	#	%	#	%	#	%	#	%	#	%	#	%
NP	5	33.3%	31	24.2%	9	12.3%	29	22.7%	9	12.3%	19	14.8%
P	8	53.3%	61	47.7%	36	49.3%	57	44.5%	49	67.1%	83	64.8%
A	2	13.3%	36	28.1%	28	38.4%	42	32.8%	15	20.5%	26	20.3%
Total	15	100%	128	100%	73	100%	128	100%	73	100%	128	100%

The two tables below display proficiencies compared for 2014 and 2015 and by RIA participation for students who took the assessments in both years.

NO RIA	Reading 2014			
Reading 2015	Not proficient	Proficient	Advanced	Total
Not proficient	0 (0.0%)	1 (16.7%)	1 (16.7%)	2 (33.3%)
Proficient	0 (0.0%)	1 (16.7%)	2 (33.3%)	3 (50.0%)
Advanced	0 (0.0%)	0 (0.0%)	1 (16.7%)	1 (16.7%)
Total	0 (0.0%)	2 (33.3%)	4 (66.7%)	6 (100.0%)
NO RIA	Mathematics 2014			
Math 2015	Not proficient	Proficient	Advanced	Total
Not proficient	0 (0.0%)	3 (8.1%)	0 (0.0%)	3 (8.1%)
Proficient	1 (2.7%)	10 (27.0%)	3 (8.1%)	14 (37.8%)
Advanced	0 (0.0%)	3 (8.1%)	17 (45.9%)	20 (54.1%)
Total	1 (2.7%)	16 (43.2%)	20 (54.1%)	37 (100.0%)
NO RIA	Science 2014			
Science 2015	Not proficient	Proficient	Advanced	Total
Not proficient	2 (5.6%)	1 (2.8%)	0 (0.0%)	3 (8.3%)

Proficient	2 (5.6%)	14 (38.9%)	5 (13.9%)	21 (58.3%)
Advanced	0 (0.0%)	4 (11.1%)	8 (22.2%)	12 (33.3%)
Total	4 (11.1%)	19 (52.8%)	13 (36.1%)	36 (100.0%)

RIA	Reading 2014			
Reading 2015	Not proficient	Proficient	Advanced	Total
Not proficient	1 (11.1%)	1 (11.1%)	0 (0.0%)	2 (22.2%)
Proficient	2 (22.2%)	3 (33.3%)	1 (11.1%)	6 (66.7%)
Advanced	0 (0.0%)	1 (11.1%)	0 (0.0%)	1 (11.1%)
Total	3 (33.3%)	5 (55.6%)	1 (11.1%)	9 (100.0%)

RIA	Mathematics 2014			
Math 2015	Not proficient	Proficient	Advanced	Total
Not proficient	4 (12.9%)	6 (19.4%)	1 (3.2%)	11 (35.5%)
Proficient	3 (9.7%)	9 (29.0%)	2 (6.5%)	14 (45.2%)
Advanced	0 (0.0%)	2 (6.5%)	4 (12.9%)	6 (19.4%)
Total	7 (22.6%)	17 (54.8%)	7 (22.6%)	31 (100.0%)

RIA	Science 2014			
Science 2015	Not proficient	Proficient	Advanced	Total
Not proficient	2 (6.5%)	5 (16.1%)	0 (0.0%)	7 (22.6%)
Proficient	3 (9.7%)	19 (61.3%)	0 (0.0%)	22 (71.0%)
Advanced	0 (0.0%)	1 (3.2%)	1 (3.2%)	2 (6.5%)
Total	5 (16.1%)	25 (80.6%)	1 (3.2%)	31 (100.0%)

The table below displays the numbers and percentages of students who increased their proficiency levels from 2014 to 2015 by RIA participation. These numbers and percentages include students who improved from not proficient to proficient and from proficient to advanced. There were too few children with two years of scores to make meaningful comparisons between participants and non-participants with reading proficiency and none of the percentages shown below are statistically significant. However, a greater percentage of RIA participants improved their math proficiency descriptively.

Improved Proficiencies	No RIA	RIA
Reading	4 (66.7%)	3 (33.3%)
Mathematics	4 (10.8%)	5 (16.1%)
Science	6 (16.7%)	4 (12.9%)

Not all students participated in RIA during the summer and three quarters of the school year before the District administered the Iowa Assessments. The table below presents the percentages of RIA students at each proficiency level by when they attended RIA.

2015 Proficiencies	Reading			Mathematics		
	Summer participant?		Total	Summer participant?		Total
Summer	No	Yes		No	Yes	
Not proficient	4 (20.0%)	18 (56.3%)	22 (42.3%)	3 (15.0%)	16 (50.0%)	19 (36.5%)
Proficient	13 (65.0%)	12 (37.5%)	25 (48.1%)	9 (45.0%)	13 (40.6%)	22 (42.3%)
Advanced	3 (15.0%)	2 (6.3%)	5 (9.6%)	8 (40.0%)	3 (9.4%)	11 (21.2%)
Total proficient	16 (80.0%)	14 (43.8%)	30 (57.7%)	17 (85.0%)	16 (50.0%)	33 (63.5%)
	Q1 RIA participant?			Q1 RIA participant?		

Q1	No	Yes	Q1 Total	No	Yes	Q2 Total
Not proficient	15 (55.6%)	7 (28.0%)	22 (42.3%)	12 (44.4%)	7 (28.0%)	19 (36.5%)
Proficient	10 (37.0%)	15 (60.0%)	25 (48.1%)	13 (48.1%)	9 (36.0%)	22 (42.3%)
Advanced	2 (7.4%)	3 (12.0%)	5 (9.6%)	2 (7.4%)	9 (36.0%)	11 (21.2%)
Total proficient	12 (44.4%)	18 (72.0%)	30 (57.7%)	15 (55.6%)	18 (72.0%)	33 (63.5%)
	<b>Q2 RIA participant?</b>			<b>Q2 RIA participant?</b>		
Q2	No	Yes	Q2 Total	No	Yes	Q2 Total
Not proficient	12 (60.0%)	10 (31.3%)	22 (42.3%)	9 (45.0%)	10 (31.3%)	19 (36.5%)
Proficient	7 (35.0%)	18 (56.3%)	25 (48.1%)	10 (50.0%)	12 (37.5%)	22 (42.3%)
Advanced	1 (5.0%)	4 (12.5%)	5 (9.6%)	1 (5.0%)	10 (31.3%)	11 (21.2%)
Total proficient	8 (40.0%)	22 (68.8%)	30 (57.7%)	11 (55.0%)	22 (68.8%)	33 (63.5%)
	<b>Q3 RIA participant?</b>			<b>Q3 RIA participant?</b>		
Q3	No	Yes	Q3 Total	No	Yes	Q3 Total
Not proficient	13 (61.9%)	9 (29.0%)	22 (42.3%)	10 (47.6%)	9 (29.0%)	19 (36.5%)
Proficient	7 (33.3%)	18 (58.1%)	25 (48.1%)	10 (47.6%)	12 (38.7%)	22 (42.3%)
Advanced	1 (4.8%)	4 (12.9%)	5 (9.6%)	1 (4.8%)	10 (32.3%)	11 (21.2%)
Total proficient	8 (38.1%)	22 (71.0%)	30 (57.7%)	11 (52.4%)	22 (71.0%)	33 (63.5%)

Clearly, the summer 2014 RIA program was least helpful to children in becoming proficient in reading and mathematics in 2015. During the school year, children who participated in RIA during each quarter were much more likely to be proficient in both reading and math than those who did not participate during that quarter.

### 21<sup>st</sup> Century Community Learning Centers Federal Reporting Data

**Proposed to serve in the application: 75 in the school year and 55 in the summer**

2014-2015	Neil Armstrong	
	Total	Regular
Total served	136	89
School year only	72	64
Summer 2014 only	40	3
Both	24	22
American Indian	2	2
Asian	0	0
Black	16	11
Hispanic	14	8
White	82	56
Unknown	7	0
Other	1	1
Multi-racial	14	11
Male	77	47
Female	59	42
Lunch Full	44	30
Free/Reduced	92	59
LEP	1	1
Disabilities	21	4

2014-2015		Neil Armstrong	
		Total	Regular
Grade	PK/TK	0	0
	K	24	20
	1	27	22
	2	24	16
	3	19	12
	4	21	10
	5	21	9

Teachers at Neil Armstrong did not complete the teacher survey.