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Select 20 After-School Tutoring Initiative Evaluation:

Final Report Prepared for the Milwaukee Public Schools

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Select 20 After-School Tutoring Evaluation

For the 2009-2010 school year, the Milwaukee Public Schools (MPS) began an after-school initiative aimed at providing the lowest-achieving students in the lowest-achieving schools with high quality academic after-school experiences. The “Select 20” name comes from the directive given to schools to select the lowest-achieving 20 students to participate. The initiative brought structured reading and math curricula to struggling students across the district attending Schools Identified for Improvement (SIFIs).

MPS partnered with the Value-Added Research Center (VARC) at the University of Wisconsin in Madison to evaluate the Select20 program and explore the following questions:

- What are the key features of each specific component of the Select 20 initiative in terms of goals, ages/grades of students served, etc.?
- How closely did the implementation of Select 20 match recommended best practices for the curricula used or similar curricula?
- What are the characteristics of students who enrolled, participated, and completed the Select 20 program, and how do they compare with characteristics of students in other after-school programming in MPS?
- How does the Select 20 initiative fit within the array of after-school programs offered by MPS, including Community Learning Centers (CLCs) and Supplemental Educational Services (SES)? In other words, to what extent does Select 20 both complement and compete with these related programs?
- How effectively did the Select20 program promote student attendance and retention?
- What was the impact of Select20 on reading and math achievement?
- What challenges did MPS schools face this year in implementing the Select 20 initiative?

VARC used record review, statistical analysis, and qualitative interviewing of key informants to address each question. This report presents VARCs work exploring the implementation and outcomes of Select20 and the results of this work.

Background of the Select 20 Initiative: Key Program Features and Recommended vs. Actual Implementation

Although the Select 20 initiative was first launched in MPS in 2008-09, the 2009-2010 school year was the first where MPS provided schools with centralized Select 20 curricula, training, and support. Further, it was the first where all SIFI schools were mandated to implement the program; the previous year, only schools which were part of the Community Learning Center (CLC) initiative participated. In 2009-2010, the state of Wisconsin's Department of Public Instruction (DPI) mandated that MPS provide students attending Schools Identified for Improvement (SIFIs) an after-school academic program in addition to the Supplemental Educational Services (SES) program already provided as part of compliance with NCLB. The specific mandate by DPI required that MPS provide a program using centralized curricula across schools and staffed by highly qualified teachers; this is the primary difference between Select20 and SES. Further, no students enrolled in SES were to be also participating in Select 20.

Three products were selected by MPS for use in the Select 20 initiative. The Mathletics and My Sidewalks on Scott Foresman Reading Street curricula were chosen for elementary students, while the APEX on-line program was chosen for middle and high school students. What follows is a brief description of each program chosen, evidence of effectiveness, MPS's implementation plan, and where available, best practices for their implementation.

Mathletics

Harcourt was commissioned to create the Mathletics curriculum by the Institute of Education Sciences (IES) of the U.S. Department of Education as a challenge to adapt high quality regular-school-day curricula to after-school settings. IES then commissioned an evaluation of Mathletics in which students were randomly selected to receive either Mathletics or typical math after-school programming, like homework help or tutoring.¹ The results of this evaluation showed Mathletics, in its first year, to have a small statistically significant impact on math gains as compared to traditional after-school math homework help and instruction (effect size .06). Even though the results for subsequent years have not been released yet and the effect size was small, the results available to date justify MPS's decision to use Mathletics. Still, it is important to recognize that the curriculum is only one part of the program. To have a reasonable expectation that MPS will replicate the findings

¹ Black, A., Doolittle, F., Zhu, P., Unterman, R., & Grossman, J. (2008) The Evaluation of Enhanced Academic Instruction in After-School Programs Findings After the First Year of Implementation. U.S. Department of Education. Retrieved from <http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=NCEE20084021> on June 28th, 2010.

of IES, and have a positive impact on participants, the implementation of Mathletics in MPS should mirror that of the implementation reported in the IES study. Specifically, IES reported the following characteristics of a properly implemented Mathletics program:

- Schools should hire certified teachers as instructors.
- Mathletics is intended for small groups of approximately 10 students per instructor.
- Instructors should receive both initial and ongoing training and support. For ongoing support, instructors should receive frequent technical assistance visits, continued support by locally based staff, and daily paid preparation time.
- Schools should make a concerted effort to keep students engaged in Mathletics by following-up with parents and students when absences occur and by using incentives to encourage attendance.

The MPS implementation plan for Mathletics is in many ways consistent with the recommendations noted above:

- Only certified MPS teachers are eligible to be Mathletics instructors.
- MPS requires teachers to attend two hours of training on the curriculum in September or November.
- Small class sizes of approximately 10 students.
- Instructors are provided two hours of on-site, paid prep time each week.

In addition to the recommended implementation plan for Mathletics, MPS also articulated several of its own policies and guidelines:

- Schools should offer a minimum of three hours of instruction time per week.
- Program Inventory Pre, Mid-year, and Post tests are to be administered to all students and recorded in the district's after-school data system, A-plus. Results of unit pre and post tests should also be entered into A-plus.
- MPS offers Mathletics to 1st through 5th grade students in 24 schools.

My Sidewalks

Developed by Pearson, My Sidewalks on Scott Foresman Reading Street is an intensive after-school program designed to improve reading by providing 30-45 minutes of instruction every day after

school for 30 weeks. Similar to Mathletics, My Sidewalks is to be delivered in small groups of approximately 10 students. According to a self-commissioned evaluation of My Sidewalks,² it achieves reading growth through the following mechanisms:

- Fluency – Through choral reading, oral reading, paired reading, or reading along with an AudioText.
- Comprehension – First students read a selection, then they answer comprehension questions, and finally after the rereading, students retell the story.
- Building Concepts – Through the use of non-fiction materials embedded within the curricula.
- Vocabulary - Through both oral and concept vocabulary practice.
- Word Work – This includes phonemic awareness, phonics, and working with decodable texts. Phonemic awareness lessons prepare children for blending lessons.

However, the results of the randomized-control-study of My Sidewalks were mixed. Although My Sidewalks participants showed large gains from pre to post, these gains were not statistically different from those of control group students. Thus, the results do not demonstrate conclusively a significant benefit from participation.

The MPS implementation plan for My Sidewalks consisted of many program elements consistent with those recommended by Pearson including:

- Only certified teachers were eligible to be My Sidewalks instructors.
- MPS required teachers to attend two hours of training on the curriculum in September or November.
- Small class sizes of approximately 10 students.
- Instructors provided two hours of on-site, paid prep time each week.

In MPS also articulated the following My Sidewalks program components:

- MPS offered My Sidewalks to 1st and 2nd grade students in 16 schools.
- Schools must offer a minimum of three hours of instruction time per week.

² Pearson. (1990). My Sidewalks Intensive Reading Intervention. Retrieved from http://assets.pearsonschool.com/asset_mgr/legacy/200915/MySidewalks_Research_19981_1.pdf on June 28th, 2010.

- Program Inventory Pre, Mid-year, and Post tests were to be administered to all students and recorded in the district's after-school data system, A-plus. Results of unit pre and post tests were to have been entered into A-plus.

APEX

Through the APEX program, a series of on-line courses were offered to students in academic areas in which they need additional help. Although courses were taught on-line, certified teachers facilitated instruction after school.

The MPS implementation plan for APEX consists of the following elements:

- 24 schools (seven middle and 17 high schools) were required to implement APEX with room to serve 440 students at any one time.
- MPS offered APEX to 8th and 9th grade students.
- Only certified teachers were eligible to be APEX instructors.
- MPS required teachers to attend training on the program prior to implementation.
- One class per school of approximately 20 students.
- Schools were to offer a minimum of three hours of instruction time per week.
- Unit Diagnostic and Wrap-up tests were to be administered to all students and recorded in the district's after-school data system, A-plus.
- Instructors provided 36 minutes of on-site, paid prep time each week.
- Middle schools should only use the Foundations course.
- High schools should only use the Literacy Advantage course.
- High school students were offered .25 course credit for successful completion of APEX.

Although there were some clear differences between the MPS implementation plans for the three programs used in Select 20, based on the overall MPS implementation plans, Mathletics, My Sidewalks, and APEX all had reasonable chances for success. Ultimately though, the success of each program relies on the fidelity of implementation for within each school implementing each program. Thus, it was not enough that MPS posit guidelines that Select 20 be implemented in a certain way; schools had to internalize those guidelines. The rest of this report explores Select 20 implementation by analyzing student enrollment and participation data by summarizing interviews conducted with MPS administrators and CLC staff involved in the implementation of Select 20.

Enrollment and Participation in Select20

Data Sources and Methods

Quantitative data used in this report include 2009-2010 student school enrollment and demographic data for students in grades 1-12, Fall 2009 WKCE reading and math achievement data for students in grades 3-8 and 10, and after-school enrollment data for SES, CLC, and Select 20 obtained from the A-plus after-school attendance system, which tracks participation in all district after-school programs. A-plus also tracks assessments given as part of after-school programs. School enrollment and demographic data are from the third Friday of the school year. These three data sources were merged so that the after-school participation, achievement, school enrollment, and demographic data were known for each student in the district. Data in the A-plus system are entered and maintained by school personnel.

Which students were to be counted as part of the Select20 program was not entirely clear. For this report, we counted students as *enrolled* in Select20 if the Aplus system indicated they were scheduled to attend any Select20 sessions. Only students who attended at least one session were counted as *participants*, however. . As it turned out, most schools did not track attendance specifically for the Select20 program. Instead, students were “swiped in” for after school in the first after-school program they attended that day, which may or may not have been Select20. No other attendance tracking was typically done for other activities after the first activity. For the purpose of this report, students identified as attending *any* after-school programs on a given day were counted as attending *all* activities on that day. Attendance was then calculated by counting the number of days students attended Select20 and dividing that by the number they were scheduled to attend. Finally, students were counted as completing Select20 if the Aplus system had a record of both their baseline and follow-up Select20 assessments.

It is important to note that we are not sure about the completeness or accuracy of the attendance data maintained by schools for the Select20 program. There are indications that some schools did not track attendance at all. Further, our assumption that a student who attended any after-school should be considered as attending all after-school programs is likely not 100% accurate. However, we are not able to determine exactly how much of a problem this is. Accordingly, the conclusion of this report contains a recommendation that data collection procedures – particularly with respect to

attendance in after-school activities through the Aplus system - be improved to the extent possible in order to provide more accurate data on program participation.

After-School Enrollment and Participation

Table 1 summarizes district enrollment and participation data for Select20 as well as for both of the other major after-school initiatives in MPS (Community Learning Centers (CLC), and Supplemental Educational Services (SES). Participation totals shown in Table 1 are not mutually exclusive; that is, students can (and do) participate simultaneously in more than one program. As described more fully below, the “overlap” between Select 20 and CLC/SES programming is both a positive (e.g., the extent to which Select 20 provides an additional opportunity for students to participate in related after-school activities) as well as a potential negative (e.g., the extent to which Select 20 competes with CLCs and SES for students and funding, the potential lack of coherence/consistency across the three initiatives, and the difficulties inherent in separating out the effects of one program from the others when conducting program evaluations).

Table 1: Grade level enrollment and participation breakdown across after-school initiatives

Grade	Select20 math enrollment	Select20 reading enrollment	Select20 math participation	Select20 reading participation	CLC participation	SES participation
1	42	69	19	38	1057	423
2	163	238	79	106	1139	437
3	397	103	158	53	1230	415
4	363	79	134	30	1258	428
5	205	26	79	##	1234	459
6	80	23	22	##	1433	638
7	43	71	17	32	1309	609
8	63	176	##	59	1369	625
9	141	19	30	0	1465	854
10	29	##	0	0	1162	621
11	22	##	0	0	1078	616
12	10	##	0	0	786	425
Total	1558	809	541	335	14520	6550

Cells with fewer than 10 students are not reported to protect the identity of students.

In addition to recording participation data for MPS after-school programs, users of the A-plus system in CLC sites are also asked to identify the *types* of CLC activities that students participate in; these activities can range from family nights and community events to homework help and peer

mentoring. The categories chosen by MPS CLC sites to describe their activities were coded into the categories presented in Table 2. It is clear that the largest share of students participating in CLC activities participated in academic after-school, sports and recreation, and/or health and nutrition activities.

Table 2: Grade level breakdown across after-school activity type participation

Grade Level	SES	Family Events	Community Events	Computer/Technology	Health/Nutrition	Sports/Recreation	Arts/Cultural/Music	Select 20 Reading	Select 20 Math	Cultural/Language	Social-Emotional	Voc ed/GED	Acad/Tutor/HW help
1	423	185	64	254	721	853	457	38	19	89	223	117	897
2	437	247	86	259	752	919	440	106	79	82	264	121	928
3	415	239	107	344	838	986	510	53	158	129	342	143	1044
4	428	281	106	360	841	1030	532	30	134	102	371	206	1066
5	459	240	80	350	819	988	481	##	79	91	428	221	1018
6	638	126	80	278	874	1124	442	##	22	35	339	150	1113
7	609	124	85	283	791	1025	373	32	17	51	345	140	1006
8	625	140	96	188	845	1105	383	59	##	38	327	132	1010
9	854	58	39	129	426	718	159	0	30	84	145	27	907
10	621	96	48	116	398	664	150	0	0	26	191	38	807
11	616	53	47	95	355	587	102	0	0	71	135	22	748
12	425	34	31	55	233	391	85	0	0	49	114	49	496
Total	6550	1823	869	2711	7893	10390	4114	335	541	847	3224	1366	11040

Cells with fewer than 10 students are not reported to protect the identity of students.

To provide some sense of how broadly MPS students participate in after-school programs, Table 3 shows that more than one in five district students (21.1%) participated in at least one of the three main after-school programs (Select 20, CLC, and/or SES) during the 2009-2010 school year. This rate ranged from nearly 20% of 1st grade students to nearly one-third of 8th grade students. Students participating only in family or community events were not considered after-school participants since participation in these events is typically characterized by a one-time event rather than sustained involvement. Later in the evaluation, when participation in Select 20 is analyzed as a function of participation in other CLC activities, this distinction is maintained.

Table 3: Total after-school enrollment across MPS as a share of district enrollment

Grade	3 rd Friday Enrollment 2009-10	Students Participating in After-School Programs	% of 3 rd Friday Enrollment in After-School Programs
1	6071	1188	19.6%
2	5845	1286	22.0%
3	5809	1342	23.1%
4	5795	1397	24.1%
5	5658	1391	24.6%
6	5400	1645	30.4%
7	5085	1536	30.2%
8	5171	1663	32.2%
9	7654	1865	24.4%
10	5850	1522	26.0%
11	5836	1442	24.7%
12	4531	1010	22.3%
Total	78748	17287	21.1%

Although only 16 schools offered My Sidewalks, 24 offered Mathletics, and 24 offered APEX, Select 20 data were available for 2,232 enrolled students across 74 schools. 1,558 students across 63 schools enrolled in Select 20 math and 809 across 34 schools in reading. 135 students across 15 schools were enrolled in both math and reading. Table 4 summarizes Select20 participation data for the 860 students across 34 schools where attendance data were available. It is not entirely clear why so many students enrolled and then ultimately did not participate. Further, it is troubling that so few students ultimately completed the program (i.e. completed follow-up assessments). Some information was obtained from our interviews with CLC administrators that may help explain why so many enrolled students did not participate, and so few participants completed the program. Later in the report we will explore these issues. However, it is likely that a significant amount of the loss is due to data quality problems, where schools failed to enter test data. It is also likely that attendance data was not kept on many of the students that were participating. We know this to be true in at least five schools, where students enrolled in Select20 did not have any attendance records but did have post assessment records (Table 4). This is likely true in other schools as well, but we are not able to determine how much program data was not entered into A-plus.

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Table 4: Breakdown of Select20 participants (Students receiving tutoring) by school

SCHOOL	Select20 - reading participants	Select20 - math participants	Select20 - all participants	Completed Program
ALLEN-FIELD	0	41	41	16
AUDUBON MIDDLE SCHOOL	44	0	44	0
BETHUNE (37TH ST)	0	54	54	0
BROWNING SCHOOL	0	##	##	0
CASS STREET SCHOOL	0	34	34	0
CLARKE STREET SCHOOL	26	0	26	0
CLEMENS SCHOOL	##	0	##	0
DUBOIS CHARTER H.S.	0	30	30	0
EIGHTY-FIRST STREET SCHOOL	##	22	23	10
ENGLEBURG SCHOOL	32	75	80	19
FIFTY-THIRD ST. SCHOOL	0	63	63	0
FOREST HOME AVE. SCHOOL	##	0	##	0
FRATNEY STREET SCHOOL	30	0	30	0
GAENSLEN SCHOOL	#	#	#	0
GREEN BAY AVENUE SCHOOL*	#	#	#	25
HAMPTON SCHOOL	0	#	#	0
HOPKINS STREET SCHOOL*	-	-	-	29
HUMBOLDT PARK SCHOOL*	-	-	-	11
JACKSON ELEMENTARY*	-	-	-	20
KAGEL SCHOOL	21	19	31	21
LA FOLLETTE SCHOOL	0	39	39	0
LINCOLN AVENUE SCHOOL	30	0	30	0
LONGFELLOW SCHOOL	0	##	##	0
LOWELL SCHOOL	0	##	##	0
MEIR SCHOOL	0	##	##	0
METCALFE SCHOOL	0	29	29	0
MITCHELL SCHOOL	18	16	34	16
PIERCE ELEMENTARY SCHOOL	16	32	36	0
RILEY SCHOOL	##	0	##	0
SHERMAN SCHOOL	##	##	14	0
THIRTY-FIFTH STREET SCHOOL	24	20	42	0
THURSTON WOODS	22	15	37	0
TIPPECANOE SCHOOL	##	0	##	0
TOWNSEND SCHOOL	17	17	29	0
WEDGEWOOD PARK SCHOOL	53	0	53	0
WHEATLEY*	-	-	-	24
WINGS	0	##	##	0
ZABLOCKI SCHOOL	17	28	39	0

*School did not track attendance data but did track test data, ## Cells with fewer than 10 students are not reported

Characteristics of Select 20 Participants

The next section of analysis portrays key characteristics of Select 20 participants, both in terms of actual characteristics as well as “odds ratios” that show how each characteristic (WKCE achievement, race/ethnicity, etc.) relates with the probability of student enrollment in Select 20. These calculations were made both overall (e.g., for all Select 20 participants) as well as separately for elementary, middle, and high school students. Four statistical models were developed to further isolate the unique relationship of student characteristics with Select 20 enrollment; small samples prevented us from running statistical models for high school students. These include separate models both with and without other afterschool program enrollment for elementary, middle, and high school. Hierarchical linear logistic modeling was used for each model, which both tests the significance of each factor in predicting Select 20 participation and provides odds ratios for each factor in terms of how much each factor either increases or decreases the probability of students enrolling in Select 20. Select20 enrollment was chosen as the dependent variable instead of actual participation in order to improve sample sizes. A more detailed description of the full model and its specifications are included in Appendix A.

Characteristics of all Select20 participants

Table 5 summarizes the demographic and achievement characteristics of Select 20 enrollees and participants across all grade levels. The great majority of participants were African-American (67%) or Hispanic (26%), and received free or reduced lunch (90%). The most common grade levels were 3rd and 4th, although a key finding is that a significant number of initially enrolled students were in grade levels not specified for participation in Select 20 (6th, 7th, 10th, 11th, or 12th grade students). However, participation numbers in these grades drop considerably, suggesting that schools may have corrected the problem before starting Select20. Another important finding is that while 64% and 55% of enrolled students were below state math and reading proficiency levels (Minimal or Basic on the Fall 2009 WKCE), respectively, as intended by the program’s purpose, 35-45% of Select 20 students were those who were either Proficient or Advanced on the WKCE. Again, it appears that many schools may have corrected this since more participants than enrolled students were low achieving; 77% and 80% of participants’ math and reading achievement was minimal or basic.

Table 5: Select 20 Enrolled and Participating Student Characteristics

	Enrolled Student	%	Participating Students	%
African-American	1587	71.1%	578	67.2%
Asian	27	1.2%	##	##
Hispanic	499	22.4%	220	25.6%
Native American**	##	##	##	##
Other	64	2.9%	28	3.3%
White	46	2.1%	26	3.0%
Female	1130	50.6%	417	48.5%
Male	1102	49.4%	443	51.5%
ELL	267	12.0%	78	9.1%
IEP	411	18.4%	165	19.2%
F/R lunch*	1452	91.8%	546	90.2%
Grade Level				
1	95	4.3%	50	6.1%
2	352	15.8%	172	20.8%
3	472	21.1%	196	23.7%
4	412	18.5%	152	18.4%
5	221	9.9%	86	10.4%
6	101	4.5%	29	3.5%
7	114	5.1%	49	5.9%
8	239	10.7%	62	7.5%
9	160	7.2%	30	3.6%
10	33	1.5%	0	0.0%
11	23	1.0%	0	0.0%
12	10	0.4%	0	0.0%
Math achievement performance level*				
Minimal	700	44.2%	277	47.7%
Basic	307	19.4%	168	28.9%
Proficient	470	29.7%	124	21.3%
Advanced	99	6.3%	12	2.1%
Reading achievement performance level*				
Minimal	333	21.0%	226	39.4%
Basic	538	34.0%	235	40.9%
Proficient	599	37.9%	101	17.6%
Advanced	105	6.6%	12	2.1%

* Data available for 1576 enrolled and 605 participating students.

**Cells with fewer than 10 students are not reported to protect the identity of students.

Table 6 summarizes the percentage of Select 20 students also participated in other after-school activities. Nearly all Select 20 students also participated in other CLC activities including other academic activities like homework help or tutoring (95%), sports and recreation activities (93%), and health/nutrition classes (88%), with nearly all engaged in a variety of other after-school activities. These results may indicate that schools targeted students already engaged in after-school programming to participate in Select 20, and/or that schools are having success enrolling Select 20 participants in a portfolio of after-school activities designed to keep them engaged in the program. It is perhaps easy to see in retrospect how this has happened, although it is important to point out again that cross-enrollment of students in different after-school programs is problematic both in the sense that it is contrary to program guidelines and because it becomes difficult to disentangle the effects of one program from another when conducting evaluation studies.

Another finding of note is that many more students were enrolled in Select 20 math (70%) than reading (36%), suggesting that more schools chose to focus on math instruction than reading. The fact that some students “overlapped” by participating in both Select 20 reading and math is contrary to the MPS implementation plan, which specified participation in one or the other, but not both. Also contrary to the MPS implementation plan, 20% of Select 20 students were also enrolled in SES. Again though, this was mostly corrected before Select20 began, with fewer students actually participating in Select20 (6%) also participating in SES.

Table 6: Percent of all enrolled Select 20 students enrolled in different MPS after-school activities

Program	% of students enrolled in Select20	% of Select20 participants
SES	19.5%	5.8%
CLC Computer/Tech	32.3%	43.9%
CLC Health/Nutrition	73.0%	88.4%
CLC Sports/Rec	88.8%	92.8%
CLC Arts/Music	38.8%	75.6%
CLC Cultural/Language	12.3%	64.6%
CLC Social/Emotional	39.2%	88.5%
CLC Vocational/GED	14.2%	34.9%
CLC Academic/Tutoring/HW help	93.0%	95.3%

Characteristics of elementary grades Select20 participants

Table 7 presents characteristics of elementary students participating in Select 20 compared to students in different types of CLC activities, SES, and those not engaged in any after-school activities. This comparison indicates that Select 20 and SES enrolled a similar set of students. The most striking difference between the groups was that students not engaged in after-school were more likely to be higher-achieving, less likely to be eligible for f/r lunch, and White. This is likely due to differences in the student characteristics of CLC and non-CLC schools.

Table 7: Characteristics of elementary students participating in after-school

	No after-school participation	Participating in other CLC academic programs	Enrolled in Select 20	Participating in Select20	Participating in SES	Participating in other CLC non-academic programs
Below state standards – math*	43.0%	54.3%	64.0%	75.2%	65.0%	54.0%
Below state standards – reading*	38.1%	50.2%	55.7%	85.1%	55.7%	49.7%
F/R Lunch	80.7%	92.6%	93.1%	91.7%	94.1%	92.2%
ELL	10.4%	16.8%	13.7%	8.5%	15.0%	15.9%
IEP	17.7%	17.5%	18.9%	19.5%	18.0%	17.6%
Female	48.7%	50.0%	51.9%	48.3%	50.0%	49.3%
African American	49.3%	61.8%	67.7%	69.5%	73.4%	61.6%
Asian	6.2%	1.4%	1.0%	.3%	1.4%	1.2%
Hispanic	22.1%	29.6%	25.4%	23.5%	21.0%	29.1%
Other Race	4.3%	3.1%	3.3%	.3%	2.5%	3.2%
White	17.3%	3.5%	2.2%	3.5%	1.2%	4.4%
Native American	0.9%	0.5%	0.4%	2.9%	0.6%	0.5%

*Achievement percentages are based on the WKCE for Enrollment and ThinkLink for participants

Table 8 presents the cross-participation of Select 20 elementary students with CLC and SES. Nearly all elementary Select 20 students were also enrolled in both other academic (99%) and non-academic (100%) CLC activities, and sizeable number were also participating in SES (7%).

Table 8: Cross-participation of Select 20 elementary students in other after-school programs

	Enrolled in Select20	Participating in Select20
Participating in SES	17.2%	7.3%
Participating in other CLC academic programs	94.8%	99.4%
Participating in other CLC non-academic programs	96.5%	100%

Tables 9 and 10 present the results of multilevel models predicting elementary student enrollment in the Select 20 initiative. The results of the first model, without other programs included, indicate that having WKCE scores below state reading and math proficiency levels (e.g., Minimal/Basic) was predictive of participation in Select 20 after all other factors were held constant, with students Minimal/Basic in math having 1.4 times greater odds of Select 20 enrollment than those Proficient/Advanced, and those Minimal/Basic in reading having 1.2 times greater odds of Select 20 enrollment than those Proficient/Advanced. Having an IEP predicted students *not* enrolling in Select 20, with special education students having only .7 times the odds of those without an IEP of Select 20 enrollment. Both African American and Hispanic students had approximately 1.7 times greater odds of enrolling in Select 20 than did White students, while students enrolled in both academic and non-academic CLC activities (see Table 10) had much greater odds of enrolling in Select 20, with 10 and 12 times greater odds, respectively.

Table 9: Results of model predicting enrollment in Select 20 for elementary students: not including other program participation

Fixed Effect	Coefficient	Odds Ratio	Lower bound	Upper bound
WKCE below state standards – math*	0.34	1.41	1.18	1.68
WKCE below state standards – reading*	0.17	1.18	1.00	1.41
F/R Lunch	-0.13	0.88	0.75	1.02
ELL	0.13	1.14	0.79	1.64
IEP*	-0.40	0.67	0.55	0.82
Female	0.08	1.08	0.95	1.23
African American*	0.52	1.68	1.41	2.00
Asian	-0.18	0.83	0.52	1.34
Hispanic*	0.55	1.74	1.48	2.04
Other Race*	0.62	1.85	1.37	2.50
Native American*	0.69	1.98	1.20	3.29

* P < .05

Table 10: Results of model predicting enrollment in Select 20 for elementary students: including other program participation

Fixed Effect	Coefficient	Odds Ratio	Lower bound	Upper bound
Enrolled in SES*	-0.15	0.86	0.64	1.17
Enrolled in other CLC academic programs*	2.32	10.19	1.42	73.02
Enrolled in other CLC non-academic programs*	2.50	12.21	1.42	104.62
WKCE below state standards – math*	0.40	1.50	1.20	1.86
WKCE below state standards – reading*	0.23	1.25	1.00	1.58
F/R Lunch	0.02	1.02	0.74	1.40
ELL	0.13	1.14	0.80	1.63
IEP	-0.20	0.82	0.66	1.02
Female	0.06	1.07	0.89	1.28
African American*	0.71	2.03	1.32	3.13
Asian	0.02	1.02	0.19	5.52
Hispanic*	0.66	1.94	1.22	3.08
Other Race*	0.74	2.09	1.20	3.63
Native American	0.85	2.35	0.58	9.45

* P < .05

Characteristics of middle grade Select20 participants

Table 11 presents characteristics of middle grade Select 20 participants compared to students in different types of CLC activities, SES, and those not engaged in any after-school activities. Similar to what was found for elementary students, the most striking difference between the groups was that students not engaged in after-school were typically higher achieving, less likely to be eligible for f/r lunch, and White. This is again likely due to both differences in the make-up of CLC and non-CLC schools as well as selection factors within schools for program participation.

Table 12 presents the cross-participation of Select 20 middle school students with CLC, and SES. Similar to elementary students, nearly all middle Select 20 students also participated in both other academic (99%) and non-academic (100%) CLC activities.

Table 11: Characteristics of middle school students participating in after-school

	No after-school participation	Participating in other CLC academic programs	Enrolled in Select 20	Participating in Select20	Participating in SES	Participating in other CLC non-academic programs
Below state standards – math*	45.5%	53.5%	62.3%	77.3%	62.6%	52.8%
Below state standards – reading*	34.3%	44.4%	53.3%	63.0%	48.6%	43.2%
F/R Lunch	79.6%	89.1%	89.4%	88.6%	87.9%	88.2%
ELL	9.5%	11.0%	6.6%	14.3%	10.1%	11.0%
IEP	19.8%	18.8%	17.2%	19.3%	21.7%	18.6%
Female	49.0%	45.1%	43.4%	43.6%	48.9%	45.5%
African American	50.6%	67.4%	79.5%	53.6%	82.1%	65.8%
Asian	6.6%	2.7%	1.5%	2.1%	1.6%	2.7%
Hispanic	21.0%	21.1%	14.8%	38.6%	11.9%	22.2%
Other Race	3.6%	2.9%	2.0%	1.4%	2.0%	3.1%
White	17.3%	5.2%	2.0%	4.3%	2.0%	5.6%
Native American	1.0%	0.6%	0.2%	0%	0.3%	0.6%

*Achievement percentages are based on the WKCE for Enrollment and ThinkLink for participants

Table 12: Cross-participation of Select 20 middle students in other after-school programs

	Enrolled in Select20	Participating in Select20
SES participant	24.0%	2.1%
Participant in other CLC academic programs	92.7%	98.6%
Participant in other CLC non-academic programs	97.8%	100%

Tables 13 and 14 present the results of multilevel models predicting middle student enrollment in the Select 20 initiative. The results of the first model, without other programs included, indicate that WKCE reading proficiency level was a significant predictor of participation in Select 20, with students Minimal/Basic in reading having 1.6 times greater odds of enrollment in Select 20. Having an IEP again predicted students *not* enrolling in Select 20, having half the odds of those without an IEP. Both African American (3.8 times) and Hispanic (1.9 times) students had greater odds of enrolling than did White students. Although the relationships was not quite as strong as what was found in elementary students, middle grade students enrolled in both academic and non-academic CLC activities had greater odds of enrolling in Select 20, with 2.4 and 8 times greater odds, respectively.

Table 13: Results of model predicting enrollment in Select 20 for middle students: not including other program enrollment

Fixed Effect	Coefficient	Odds Ratio	Lower bound	Upper bound
WKCE below state standards – math	-0.02	0.98	0.68	1.43
WKCE below state standards – reading*	0.44	1.55	1.15	2.11
F/R Lunch	-0.08	0.93	0.72	1.19
ELL*	-0.36	0.70	0.49	0.99
IEP*	-0.64	0.53	0.40	0.69
Female	-0.12	0.89	0.67	1.18
African American*	1.32	3.76	2.47	5.74
Asian	0.32	1.37	0.51	3.70
Hispanic*	0.64	1.89	1.41	2.55
Other Race*	0.80	2.22	1.24	3.98
Native American	-0.35	0.70	0.19	2.67

* P < .05

Table 14: Results of model predicting enrollment in Select 20 for middle students: including other program enrollment

Fixed Effect	Coefficient	Odds Ratio	Lower bound	Upper bound
Enrolled in SES*	-0.15	0.86	0.78	0.96
Enrolled in other CLC academic programs*	0.87	2.39	1.76	3.24
Enrolled in other CLC non-academic programs*	2.10	8.17	6.27	10.65
WKCE below state standards – math	0.08	1.08	0.92	1.28
WKCE below state standards – reading*	0.24	1.28	1.07	1.52
F/R Lunch*	-1.10	0.33	0.26	0.43
ELL	-0.16	0.85	0.66	1.10
IEP*	-0.26	0.77	0.67	0.89
Female	-0.06	0.94	0.84	1.05
African American*	0.46	1.58	1.30	1.93
Asian	-0.03	0.97	0.62	1.53
Hispanic*	0.22	1.25	1.04	1.49
Other Race	0.13	1.14	0.87	1.50
Native American	-0.49	0.61	0.32	1.15

* P < .05

High school grades student results (grades 9 through 12)

Table 15 presents characteristics of high school students participants in Select 20 compared to students in different types of CLC activities, SES, and those not engaged in any after-school activity. Again, Select 20 and SES enrolled a similar group of students. Table 16 presents the cross-participation of Select 20 high school students with CLC, and SES. Nearly all high school Select 20 students were also enrolled in both other academic (87%) and non-academic (100%) CLC activities, and a few were also enrolled in SES (3%). No models of Select 20 enrollment are presented for high school students because of low sample sizes.

Table 15: Characteristics of high school students participating in after-school

	No after-school participation	Participating in other CLC academic programs	Enrolled in Select 20	Participating in Select20	Participating in SES	Participating in other CLC non-academic programs
Below state standards – math*	68.4%	72.1%	83.3%	96.2%	83.3%	71.3%
Below state standards – reading*	57.0%	61.3%	70.0%	89.3%	72.4%	57.9%
F/R Lunch	74.6%	80.1%	80.0%	80.0%	86.9%	78.0%
ELL	6.3%	9.2%	11.1%	0%	9.5%	7.4%
IEP	20.1%	16.7%	17.7%	26.7%	21.3%	15.8%
Female	49.0%	49.3%	56.2%	70.0%	51.0%	48.1%
African American	55.7%	74.1%	77.4%	90.0%	76.0%	74.8%
Asian	5.7%	6.2%	1.8%	0%	5.0%	4.5%
Hispanic	19.5%	14.2%	16.8%	0%	13.6%	13.3%
Other Race	2.2%	1.3%	1.8%	6.7%	1.8%	1.6%
White	15.9%	3.9%	1.3%	3.3%	3.3%	5.5%
Native American	1.1%	0.3%	0.9%	0%	0.3%	0.4%

*Achievement percentages are based on the WKCE for Enrollment and ThinkLink for participants

Table 16: Cross-participation of Select 20 high school students in other after-school programs

	Enrolled in Select20	Participating in Select20
SES participant	26.5%	3.3%
Participant in other CLC academic programs	81.4%	86.7%
Participant in other CLC non-academic programs	77.9%	100%

Attendance, Duration, and Completion of Select20 Program

In this section we explore attendance, program dosage, and program completion within the Select20 program. Attendance rates were calculated by dividing the number of days a student attended Select20 by the number they were scheduled to attend. Program duration is defined in this report by the number of days a student attended Select20. As noted previously, program completion as defined for this report is determined by whether a student completed an end-of-program assessment, which all students should have received as a way to measure their learning. These are reported across all students and broken down by grade level, race, gender, disability status, ELL, and F/R lunch groups.

Math attendance, duration, and completion

Across the entire math initiative, Select20 students averaged 80% attendance, 25 days of participation, and 12% completed the program. Across racial/ethnic groups, there was very little difference between the attendance rates of African-American and Hispanic students (Table 17). However, Hispanic students averaged greater duration of participation (34 days compared to 23) and were more likely to complete the program (33% compared to 8%). Across genders, more males completed Select20 than did females (16% compared to 9%). ELL students had greater duration of participation (33 days) and were more likely to complete the program (42%). The results of students with disabilities did not differ from the general population. Across grade levels, it appears Select20 was more successful in 3rd, 4th, and 5th grade; these were the only grade levels in which any students completed the program.

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Table 17: Participation, attendance, and retention of Select20 Math participants

	Participants	Attendance %	Average Days of Participation	Number Completing Select20	% of Participants Completing Select20
African-American	415	79.9%	23.1	31	7.5%
Asian	##	##	##	##	##
Hispanic	101	79.4%	33.9	33	32.7%
Native American	##	##	##	##	##
Other	22	78.3%	23.5	##	##
White	14	93.8%	12.4	##	##
Female	297	78.6%	25.0	26	8.8%
Male	260	82.1%	24.5	41	15.8%
ELL	33	83.8%	33.1	14	42.4%
IEP	95	80.3%	25.1	##	##
F/R lunch	394	78.7%	25.1	59	15.0%
Grade Level					
1	19	93.0%	2.3	0	0.0%
2	79	79.7%	33.0	0	0.0%
3	158	80.2%	24.2	26	16.5%
4	134	80.2%	28.4	29	21.6%
5	79	73.6%	25.4	12	15.2%
6	22	66.2%	28.5	0	0.0%
7	17	88.1%	6.2	0	0.0%
8	##	##	##	0	0.0%
9	30	87.7%	24.3	0	0.0%
10	0	-	-	-	-
11	0	-	-	-	-
12	0	-	-	-	-

Cells with fewer than 10 students not reported to protect the identity of students

To get a better understanding of duration of participation, we also looked at its distribution (Figure 1). As is evident in the figure, by far the most common pattern of participation was to attend fewer than 10 sessions. Nearly half of all Select20 math participants attended fewer than 10. Since attendance rates remained high, even though a large percentage of students did not remain in the program, it appears that schools removed students from Select20 after it was apparent they were not going to attend in the future.

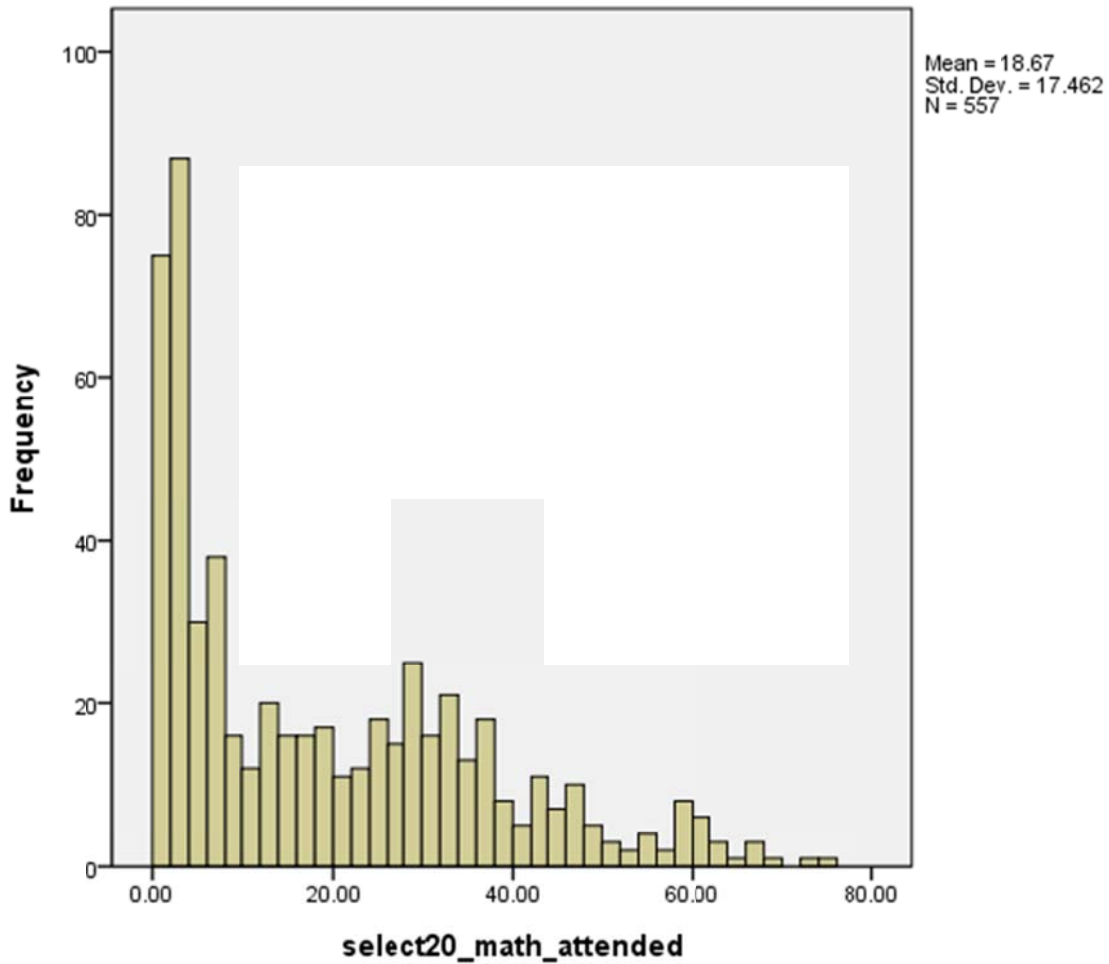


Figure 1: Distribution of Days of Attendance in Select20 Math Program

Reading attendance, duration, and completion

Across the entire reading initiative, Select20 students averaged 82% attendance, 25 days of participation, while only 6% completed the program. Across racial/ethnic groups, Hispanic students had higher attendance rates (93%), duration in the program (32 days on average), and completion rates (12%) than African American students (Table 17). The numbers were even better for English Language Learners (ELL), with 96% attendance and 19% completion rates. Across genders, more males completed Select20 (16% compared to 9%). ELL students had greater duration of participation (33 days) and were more likely to complete the program (42%). It is difficult to interpret the results across grade levels, but it appears Select20 was more successful in 3rd, 4th, 7th, and 8th grade, with higher attendance rates and greater program involvement.

Table 18: Participation, attendance, and retention of Select20 Reading participants

	Participants	Attendance %	Average Days of Participation	Number Completing Select20	% Completing Select20
African-American	205	73.1%	19.9	##	##
Asian	##	##	23.5	##	##
Hispanic	134	93.0%	32.4	16	11.9%
Native American	##	##	##	##	##
Other	##	##	##	##	##
White	16	90.4%	34.0	0	0.0%
Female	147	79.8%	23.9	7	4.8%
Male	219	83.1%	25.8	15	6.8%
ELL	52	95.6%	27.9	10	19.2%
IEP	83	83.6%	30.2	5	6.0%
F/R lunch	179	91.5%	22.5	19	10.6%
Grade Level					
1	38	79.2%	26.2	##	##
2	106	62.1%	27.5	##	##
3	53	84.1%	24.4	##	##
4	30	92.0%	22.4	10	33.3%
5	##	##	##	##	##
6	##	##	##	##	##
7	32	95.7%	16.2	0	0.0%
8	59	95.7%	26.2	0	0.0%
9	-	-	-	-	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-

Cells with fewer than 10 students not reported to protect the identity of students

To get a better understanding of duration of reading participation, we also looked at its distribution (Figure 2). As was the case in the math program, by far the most common pattern of participation was to attend fewer than 10 sessions. Again, nearly half of all Select20 reading participants attended fewer than 10. As was the case for Select20 math attendance data shown in Figure 1, we speculate that schools removed students from the program after it became apparent that they were unlikely to attend in the future.

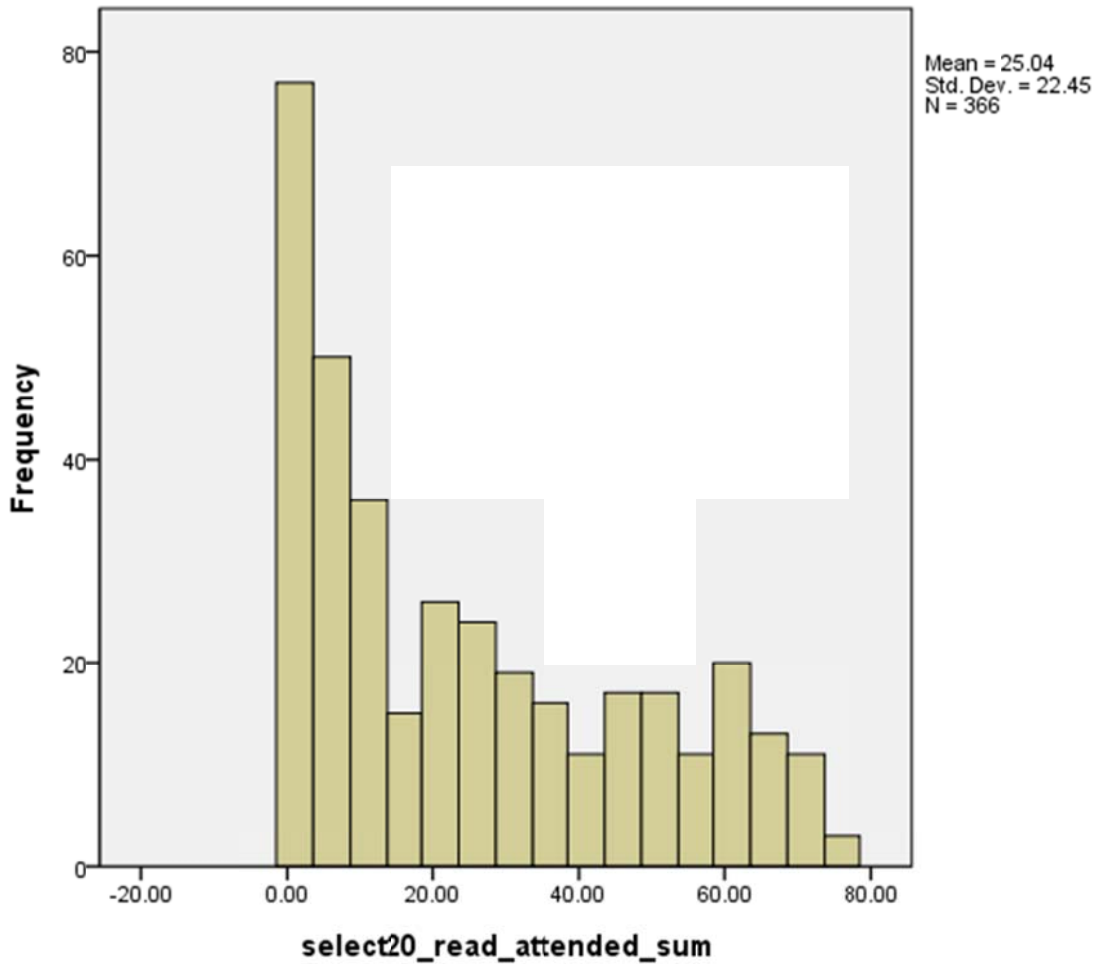


Figure 2: Distribution of Days of Attendance in Select20 Reading Program

Impact of Select20 Program on Student Achievement

We attempted to use as many sources of data as possible to explore the impact of the Select20 program. In particular, we looked at the results of program-specific tests given to students as part of participation (in terms of change in percent correct), changes in proficiency levels on the ThinkLink benchmark test from January to June, and changes in student achievement scales scores on the ThinkLink. The results of these analyses are summarized below.

Program Test Results

Students in both the Mathletics and My Sidewalks programs took unit tests at the start, middle and end of the program to track their learning. 132 students completed both a baseline and mid-program test, while 67 completed all three tests. These are of the over 2,200 enrolled students and 860 students attending sessions. The following results are of students who completed at least two of these tests.

Taken together, students averaged a score of 52% (95% confidence interval 48.7% to 55.4%) correct at baseline and 69% (95% confidence interval 65.1% to 72.4%) at follow-up. Thus, students who completed Select20 clearly performed better on the tests at follow-up.

Looked at separately, students in the My Sidewalks program, on average, improved from a score of 71.8% to 90.1% percent correct ($n = 49$), while students in the Mathletics program improved from 45.6% to 61.6% ($n = 150$). What is not known from these simple descriptive comparisons, of course, is how much of this improvement can be attributed in a causal manner to the programs themselves (e.g., would not have occurred anyway through growth in students' math knowledge as a result of instruction provided during the school day). This issue is addressed in greater detail below.

Changes in achievement performance levels

One of the primary mandates of the Select20 program was that only students with low reading and math proficiency levels would be selected to participate. As such, we explored changes in student reading and math proficiency from the beginning to the end of the Select20 program (Tables 19 and 20). The ThinkLink benchmark test was administered in January and June, and therefore approximately covers the implementation period of the Select20 program. The results showed that many more Select20 participants moved up in proficiency levels (from minimal to basic and from basic to proficient) than moved down. In math, of the 195 students who started Select20 with

minimal proficiency, only 82 (42%) remained with minimal math proficiency at follow-up. In reading, of the 73 students who started with minimal proficiency only 33 (45%) remained at follow-up.

These results suggest that the Select20 program may have a positive impact on reading and math achievement. However, we must caution against over-interpretation of these results. With so few students actually completing Select20, it is likely that severe selection biases exist in the sample. It is entirely possible that students not receiving a benefit from the program or not doing well in school more generally, might stop attending Select20. Thus, the remaining students look little like the general population of students. Further, by selecting students at the bottom of achievement performance, negative measurement error is maximized. Thus, students retaking the test at follow-up are likely to perform better simply due to regression to the mean. The next set of analyses attempts to address this through a measure-error-corrected value-added achievement model.

Table 19: Changes in Select20 participant math performance levels

	Follow-up Math Performance Levels				Total
	Minimal	Basic	Proficient	Advanced	
Baseline Math Performance levels					
Minimal	82	69	44	0	195
Basic	22	36	67	##	126
Proficient	##	##	70	##	87
Advanced	##	##	##	##	##
Total	106	114	183	11	414

Cells with fewer than 10 students not reported to protect the identity of students

Table 20: Changes in Select20 participant reading performance levels

	Follow-up Reading Performance Levels				Total
	Minimal	Basic	Proficient	Advanced	
Baseline Reading Performance levels					
Minimal	33	33	##	##	73
Basic	##	16	31	0	52
Proficient	##	##	20	##	28
Advanced	0	##	##	##	##
Total	40	55	62	##	160

Cells with fewer than 10 students not reported to protect the identity of students

Value-Added ThinkLink Achievement Model

The next analytic strategy we used was the development of two value-added models (one for math and one for reading) to measure ThinkLink scale score change. The developed model was designed to minimize selection bias and control for measurement error (regression to the mean). Selection bias was somewhat controlled for by using an “intent to treat” selection framework. With an “intent to treat” approach, the achievement growth of all students who participated in Select20 is compared to non-participants, regardless of how much they participated. Alternatively, only students who complete Select20 are compared to non-participants. To control for regression to the mean, our models correct for measurement error of baseline reading and math achievement by removing the variance in the pretests that is attributable to measurement error. The inclusion of both reading and math baseline scores for both reading and math models further controls for measurement error. The model used in each analysis is presented below.

$$Y_1 = \theta P_i + \lambda^{\text{read}} Y_{0i}^{\text{read}} + \lambda^{\text{math}} Y_{0i}^{\text{math}} + \beta X_i + \alpha S_i + \epsilon_i$$

Where:

- P_i is participation in Select20 with a slope of θ
- Y_1 is the post-test score;
- Y_{0i}^{read} and Y_{0i}^{math} are the baseline reading and math scores with slopes of λ .
- X_i is a vector of student characteristics with a slope of β ;
- S_i is a vector of schools;
- α is a vector of school value-added effects;
- ϵ_i is the error in post achievement.

In addition to the typical variables controlled for like race/ethnicity, disability, F/R lunch, gender, and grade level, our models also control for student participation in Supplemental Educational Services (SES) tutoring, school mobility, student behavior in the Fall 2009 (number of days lost to suspension), absences (number of regular-school-day absences), and tardiness; all of these were included as students characteristics. The inclusion of these factors was designed to further improve the precision of our estimate of Select20 impact. Finally, the resulting models also included the fixed effects of schools, so as to disentangle program and school effects on achievement.

Table 21 presents the results of the Mathletics program model. These results show that while Mathletics had a small positive impact on math achievement, this gain was not statistically significant ($B = .84, P > .05$). Table 22 presents the results of the My Sidewalks model. Here, a small *negative* effect (-1.98) is observed, although it is again not statistically significant..

Table 21: Results of value-added model of math achievement

Variable	DF	Estimate	StdErr	tValue	Probt
Baseline Reading	1	0.33	0.01	25.7	0.000
Baseline Math	1	0.5	0.01	41.86	0.000
Times tardy to school	1	0	0.04	0.11	0.911
Days suspended	1	0.11	0.3	0.38	0.703
Days absent	1	-0.26	0.07	-3.89	0.000
female	1	-2.85	0.62	-4.61	0.000
ELL	1	0.59	1.03	0.57	0.569
IEP	1	0.75	0.84	0.89	0.372
frlunch	1	0.63	1.06	0.6	0.550
third	1	76.37	4.18	18.26	0.000
fourth	1	61.73	4.22	14.64	0.000
fifth	1	57.98	4.34	13.35	0.000
sixth	1	50.97	4.41	11.56	0.000
seventh	1	47.44	4.47	10.62	0.000
eighth	1	51.34	4.56	11.26	0.000
white	1	20.37	3.05	6.69	0.000
Hispanic	1	16.86	2.94	5.73	0.000
African American	1	15.67	2.91	5.38	0.000
Asian	1	21.6	3.59	6.02	0.000
other	1	16.65	3.24	5.13	0.000
mobility	1	0.66	1.96	0.34	0.735
Select20 Math	1	0.84	1.4	0.6	0.547
SES	1	1.17	1.51	0.77	0.440

Table 22: Results of ThinkLink value-added model of reading achievement

Variable	DF	Estimate	StdErr	tValue	Probt
Baseline Reading	1	.57	.01	49.75	.000
Baseline Math	1	.27	.01	25.44	.000
Times tardy to school	1	-.02	.03	-.64	.524
Days suspended	1	-.44	.27	-1.63	.102
Days absent	1	-.03	.06	-.41	.682
female	1	2.13	.55	3.86	.000
ELL	1	-.24	.92	-.27	.790
IEP	1	-4.32	.75	-5.78	.000
frlunch	1	-1.10	.94	-1.17	.243
third	1	45.49	3.71	12.27	.000
fourth	1	53.25	3.73	14.27	.000
fifth	1	44.93	3.85	11.67	.000
sixth	1	44.52	3.91	11.40	.000
seventh	1	63.24	3.96	15.97	.000
eighth	1	60.60	4.05	14.98	.000
white	1	17.66	2.69	6.57	.000
Hispanic	1	14.61	2.59	5.63	.000
African American	1	13.63	2.57	5.30	.000
Asian	1	17.53	3.17	5.53	.000
other	1	14.55	2.88	5.06	.000
mobility	1	.14	1.74	.08	.935
Select20 Reading	1	-1.98	1.87	-1.06	.289
SES	1	2.44	1.34	1.82	.068

Qualitative Analysis

Qualitative data obtained from unstructured interviews with MPS and CLC administrative staff, as well as from an on-line survey of CLC administrators, were also used to inform a greater understanding of the Select 20 initiative. Two CLC organizations and two MPS administrators participated in the qualitative component of the evaluation. The two MPS administrators were interviewed simultaneously, while a one-on-one interview was conducted with one CLC administrator and one CLC administrator completed an on-line survey. To protect respondent anonymity, only major themes are reported across the four participants.

Teacher recruitment and training

Recruitment challenges associated with teaching staff resulted in the Select 20 initiative start being delayed in some schools until February, as opposed to the intended roll-out in the Fall of the previous year. Respondents attributed these challenges to the existence of the SES program in the same schools, as SES offers similar services to students and also uses certified teachers from the same schools to instruct students. Further, SES is run by private organizations that are able to pay teachers much more than they would earn as Select 20 instructors. Thus, the program had a great deal of trouble enticing quality teachers for Select 20. Ultimately, program administrators were able to identify enough certified teachers as instructors, but the work definitely delayed implementation. Teacher training also delayed implementation, since after qualified instructors were identified they were required to receive two hours of professional development on Select 20. Certified instructors were eventually identified, and all ultimately did receive training.

Student recruitment, attendance and retention

Respondents also reported that recruiting and retaining students, as well as maintaining accurate attendance data, was difficult. This was somewhat attributed to the existence of SES. The SES program was already in place in these schools and offered an established, trusted academic after-school experience for students wanting/needing help. When Select 20 became available later in the school year, many of the students likely to want after-school academic support had already signed up for SES. This may partially explain why the students that ultimately signed up for Select 20 were also engaged in other/non-SES after-school academic programs. Students already engaged in after-school may have represented a convenient population of students who could be enticed to participate in Select 20. Since less than 25% of MPS students overall are engaged in some type of after-school activity, recruiting students for Select 20 from those already engaged in after-school prevents Select 20 from reaching additional students who need academic after-school help. Recruitment and retention was especially challenging in high schools, where students typically must be recruited to participate, rather than in elementary or middle schools, where parents are generally more able to influence what types of programming their children will participate in. If student retention and attendance are to be more successful next year, MPS should start the program earlier in the year, and develop attendance and retention strategies and incentives for both students and schools, particularly at the high school level.

School Support

It was also reported that schools did not receive enough support to adequately implement Select 20. Through follow-up conversations with MPS, we learned that support was given but that the support process was rolled out to schools until later in the Spring. Thus, the support process was not in place, when schools were beginning to run the program, i.e. when it was most needed.

Summary and Discussion

This report includes the results of an evaluation of the Select 20 after-school academic program in the Milwaukee Public Schools (MPS). Student enrollment, participation, attendance, and completion data were supplemented with interviews of MPS administrators and Community Learning Center (CLC) staff to inform the evaluation. These data were used to address the following evaluation questions:

What are the key features of each specific component of the Select 20 initiative in terms of goals, ages/grades of students served, etc.?

Each of the three main components of Select 20 – Mathletics, My Sidewalks, and Apex – is designed to serve a specific niche in terms of supplemental after-school programming for students who demonstrate additional needs beyond the regular classroom. A recurring theme throughout this report, however, is that some degree of “overlap” exists between the programs in terms of which students are served, as well as between Select 20 and other after-school programs in MPS. This is relevant since a) limited resources are not being distributed across students, b) overlapping programs runs contrary to program guidelines, c) it makes it more difficult to disentangle unique program effects, and d) it makes it more difficult to ensure that programs complement each other.

How closely did the implementation of Select 20 match recommended best practices for the curricula used or similar curricula?

With a few exceptions, the implementation strategy MPS developed for the three Select 20 initiatives was consistent with the strategies recommended by the developers. The MPS model included small class sizes, up-front training of certified instructors, and intensive, consistent instruction. MPS did not, however, provide ongoing training and support resources to instructors, nor did it outline strategies for improving student attendance and retention. Both of these areas were mentioned as areas of concern by interview participants.

What are the characteristics of students who enrolled and participated in the Select 20 initiative, and how do they compare with characteristics of students in other after-school programming in MPS?

Students in the Select 20 initiative looked very similar to those in SES. The majority of Select 20 enrollees and participants were eligible for free or reduced lunch and were minority students (African American or Hispanic). Although most enrolled students were achieving below state reading and math standards, a large number (around 40%) were in fact meeting state standards. This suggests that schools should be more targeted in their recruitment toward students with the greatest academic need. Further, since nearly all Select20 participants also participated in other after-school activities, schools may be struggling to engage new students in after-school through the Select 20 initiative.

How does the Select 20 initiative fit within the array of after-school programs offered by MPS, including Community Learning Centers (CLCs) and Supplemental Educational Services (SES)? In other words, to what extent does Select 20 both complement and compete with these related programs)?

Although it was specifically contrary to the program model, approximately one in five students enrolled in Select 20 was also in SES. However, this rate was considerably smaller when considering only students who actually received tutoring in Select20. This finding likely reflects the difficulties schools had recruiting students for Select 20. Further, nearly all Select 20 students were also engaged in several other after-school academic and non-academic activities. This may indicate that schools attempting to fill their Select 20 slots simply asked the students already coming to after-school activities to participate in Select 20 rather than working to recruit harder-to-reach students or finding ways to make after-school participation logistically feasible for these students.

How effectively did the Select20 program promote student attendance and retention?

Student *enrollment* and *attendance* across the initiative was high. However, student *retention* was extremely low. Depending on the data source, between 86 (using participation data) and 167 (using test data) students completed Select 20. With over 2,000 students initially enrolling in Select 20, the resulting number of completions is troubling. It may be that some of the lack of data on student completion is due to schools failing to enter attendance, but how much is not known.

What was the impact of Select20 on reading and math achievement?

Students who completed Select20 demonstrated improved achievement performance levels on the district's benchmark test and on tests embedded within the curricula. However, this is likely due to selection bias and regression to the mean. In more rigorous statistical analysis, Select20 participants were not found to demonstrate greater achievement growth than similar students in the same schools not participating in Select20.

What challenges did MPS schools face this year in implementing the Select 20 initiative?

The largest obstacle identified for the successful implementation of Select 20 was the existence of the SES program in the same schools. SES programs competed with Select 20 for both students and qualified instructors. SES programs are run by private organizations capable of paying teachers a much higher hourly rate than Select 20 was able to provide. Further, since there was no waiting list for the SES program, and any students could sign up for SES, it is not entirely clear that there were students interested in participating in another program like Select 20. These realities resulted in the program starting later in the year, with some schools starting instruction as late as February or March. Although all schools were eventually able to recruit qualified instructors and students, they faced a difficult task of maintaining student interest in the program, with many students ultimately dropping out.

It is also clear that MPS must provide more oversight of attendance entry in the Aplus system. All of the numbers presented in this report are somewhat suspect since there is evidence that certain schools did not enter any student attendance. It is unknown how much missing attendance there truly is however. To be able to make a determination of the effectiveness of Select20, the evaluation will need to be confident that participation data is reasonably complete and accurate. We are not able to say that at this time.

Recommendations Moving Forward

This first year of implementation was certainly challenging to MPS. Schools, Community Learning Center Lead Partner Organizations, and central office had to scramble to get Select20 implemented across the district. As was communicated to us in our conversations with program staff and administration, the goal this first year was just to get the program started. Moving forward however, we have developed some recommendations for improving implementation:

1. The neediest students should be actively recruited for participation. Although most Select20 participants were low-achieving, a sizeable number were high-achieving. It is not clear that Select20 offers the right educational experience for these students.
2. Cross-enrollment of Select20 with other after-school programs should be carefully examined. Other after-school programs may be used as a carrot for getting students engaged in Select20, but we worry that certain students are being provided with multiple after-school experiences at the expense of other students who might benefit but are not given the opportunity. After-school might act as an exclusive club for the favorite students of school staff.
3. More oversight over the data entry process is needed. Much of the data used in this report was suspect. We did the best we could with the data available but there were clear indications that there were problems with it (failing to enter test and/or attendance data). Better quality data would produce more reliable and actionable evaluation conclusions.
4. Provide instructors more ongoing support and training. It was reported to us that, after the initial trainings, instructors wanted additional support and ongoing training.

Appendix A: Models used to explore participation in Select 20

Model specifications:

- All variables except for participation in Select 20 were grand mean centered.
- Students with missing data were not included in models.
- Statistical models were built using the HLM 6.0 software package.
- Separate models were developed for elementary, middle and high school.
- Student effects included in the models: 2009 WKCE math performance (1 = below state standards), 2009 WKCE reading performance (1 = below state standards), gender (1 = female), IEP status (IEP), English Language Learner status (ELL), race (Black, Hispanic, Asian, Native, Other race, White), and F/R lunch eligibility (F_R_LUNCH).
- Additional models included enrollment in SES (IN_SES), other academic after-school programs (ACAD_TUT), and non-academic after-school activities such as enrichment or recreation (NON_ACAD).
- All variables included in the models were treated as fixed except for school which was treated as random.

Models without other program participation:

Level-1 Model

$$\text{Prob}(Y=1 | B) = P$$

$$\log\left[\frac{P}{1-P}\right] = B_0 + B_1*(WKCE_MATH) + B_2*(WKCE_READING) + B_3*(F_R_LUNCH) + B_4*(ELL) + B_5*(IEP) + B_6*(FEMALE) + B_7*(AFRICAN_AMERICAN) + B_8*(ASIAN) + B_9*(HISPANIC) + B_{10}*(OTHER_RACE) + B_{11}*(NATIVE_AMERICAN)$$

Level-2 Model

$$B_0 = G_{00} + U_0$$

$$B_1 = G_{10}$$

$$B_2 = G_{20}$$

$$B_3 = G_{30}$$

$$B_4 = G_{40}$$

$$B_5 = G_{50}$$

$$B_6 = G_{60}$$

$$B_7 = G_{70}$$

$$B_8 = G_{80}$$

$$B_9 = G_{90}$$

$$B_{10} = G_{100}$$

$$B_{11} = G_{110}$$

$$\text{Level-1 variance} = 1/[P(1-P)]$$

Model with other program participation:

Level-1 Model

$$\text{Prob}(Y=1 | B) = P$$

$$\log\left[\frac{P}{1-P}\right] = B_0 + B_1(\text{IN_SES}) + B_2(\text{ACAD_TUT}) + B_3(\text{NON_ACAD}) + B_4(\text{WKCE_MATH}) + B_5(\text{WKCE_READING}) + B_6(\text{F_R_LUNCH}) + B_7(\text{ELL}) + B_8(\text{IEP}) + B_9(\text{FEMALE}) + B_{10}(\text{AFRICAN AMERICAN}) + B_{11}(\text{ASIAN}) + B_{12}(\text{HISPANIC}) + B_{13}(\text{OTHER_RACE}) + B_{14}(\text{NATIVE AMERICAN})$$

Level-2 Model

$$B_0 = G_{00} + U_0$$

$$B_1 = G_{10}$$

$$B_2 = G_{20}$$

$$B_3 = G_{30}$$

$$B_4 = G_{40}$$

$$B_5 = G_{50}$$

$$B_6 = G_{60}$$

$$B_7 = G_{70}$$

$$B_8 = G_{80}$$

$$B_9 = G_{90}$$

$$B_{10} = G_{100}$$

$$B_{11} = G_{110}$$

$$B_{12} = G_{120}$$

$$B_{13} = G_{130}$$

$$B_{14} = G_{140}$$

$$\text{Level-1 variance} = 1/[P(1-P)]$$

Appendix B

The Value-Added Research Center in the Wisconsin Center for Education Research at the University of Wisconsin has been contracted by the Milwaukee Public Schools to evaluate the Select 20, after-school tutoring program.

As part of this evaluation, community partners are being asked to complete a short survey about the program. You are not required to complete this survey. If you choose to complete the survey, your responses will help the Milwaukee Public Schools improve the Select 20 program. Your responses are anonymous, will be kept confidential, and will not be shared with anyone outside the Wisconsin Center for Education Research. Responses will only be reported in the aggregate. The survey should take between 10 to 15 minutes to complete.

If you have any questions, or would like a report of the results, please contact me, Curtis Jones, at cjones5@wisc.edu. Thank you for your time.

1. What grade levels do you work with in providing after-school programming? (select all that apply)

- Elementary grades
- Middle grades
- High school grades

2. Which curricula did you use in the Select20 program? (select all that apply)

- My Sidewalks
- Mathletics
- APEX

3. What month did students begin participating in Select20 in your schools?

4. What challenges did your schools face coordinating Select20 with other after-school programs such as SES?

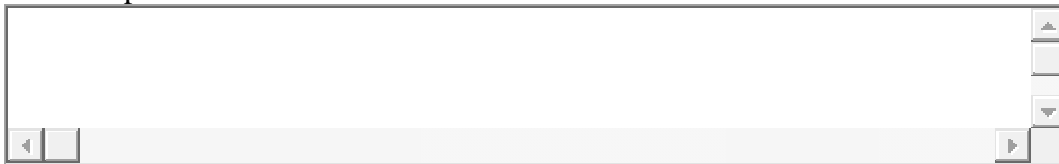
5. What goal(s) did you have for the Select 20 program this year?



6. How well did the Select 20 program meet your expectations?

- Completely
- Partially
- Not at all

Please explain



7. What criteria were used to select students to participate into Select 20?



8. What methods were used to recruit students to participate in Select20 and how successful were your methods?



9. What challenges did you face in recruiting students for Select20?

10. Please describe your methods and any challenges your program faced selecting teachers for the Select20 program.

11. Please rate the quality of each curriculum your school used in the Select 20 program?

	Excellent	Good	Average	Needs Improvement	Poor	Don't know/Didn't use
APEX	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My Sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mathletics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain

12. Please indicate how much you agree or disagree with each statement about Select20 by checking the appropriate box:

	Strongly Agree	Agree	Disagree	Strongly Disagree
The student-to-instructor ratio was appropriate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree
The students who most needed academic help participated in Select20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My school received enough support to implement Select20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My school had enough supplies to successfully run Select20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall, I am satisfied with the Select 20 program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Select 20 curriculum is strong and appropriate for student needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As Select20 is currently structured, students participating get enough of it to meaningfully improve areas of academic need	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. What comments do you have about the Select20 Program?