

IMPACT OF SOCIAL EMOTIONAL LEARNING (SEL)

CHICAGO ANALYSIS AND INTERPRETATION

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EXECUTIVE SUMMARY

Advances in many fields—including neuroscience and psychology—have moved the work in social emotional learning (SEL) forward over the last fifteen years. We know that early experiences shape a child’s developing neurological and biological systems for better or worse, and that the types of stressful experiences that are common in families living in poverty can alter children’s neurobiology in ways that undermine their ability to succeed in school and in life (Thompson, 2014). While this is very frightening, we also know that the brain has an amazing ability to be rewired. This malleability, known as neuroplasticity, means that we can intervene to

repair the damage that trauma has inflicted on many children. SEL can serve as an important tool to address child trauma, as research shows that explicit instruction in meta-cognition, and guided practice with inter- and intrapersonal skills can change how people learn and interact with others.

As the brain develops, neural pathways are created, and these connections are shaped over time by experience (Fox, Levitt & Nelson, 2010). There is increasing evidence that neuroplasticity is disrupted by stress, and this disruption is seen on both the structural and molecular levels (Pittenger & Durnan, 2008). Stressful early experiences alter neural functioning and connectivity within and between the areas of the brain responsible for coordinating thoughts and actions and regulating the stress response (Holmes & Wellman, 2009). Stress causes the release of the neurotransmitter, cortisol, and constant, unresolved stress can cause what is known as the cortisol cascade effect (Carpenter et al, 2011). Too much cortisol leads to mood and behavior issues and disruptions in memory and recall (Durlak, 2015 p. 85). Felitti's 1998 study found a strong relationship between exposure to abuse or dysfunction and multiple health risk factors later in life (Felitti et al, 1998). In other words, the more trauma a child experiences, the more the development of the child's brain is impacted.



HOW SEL MITIGATES THE EFFECTS OF TRAUMA?

- Social-emotional learning teaches young students how to cope with everyday disappointments as well as the deep cuts of trauma. According to published research by Susan Ward-Roncalli, a Social-Emotional Learning Facilitator for the Division of Instruction with the Los Angeles Unified School. “Students can better respond to the

effects of trauma by developing social-emotional competencies. The brain's neuroplasticity makes it possible for repeated experiences to shape the brain and even reverse the effects of chronic stress," For our most at-risk students, who live in poverty and/or who may witness or experience traumatic experiences, SEL is an extraordinary tool for repairing the damage and for building lifetime coping skills. (The Resilient Educator, 2020)

HOW SEL CONTRIBUTES TO ACADEMIC PERFORMANCE

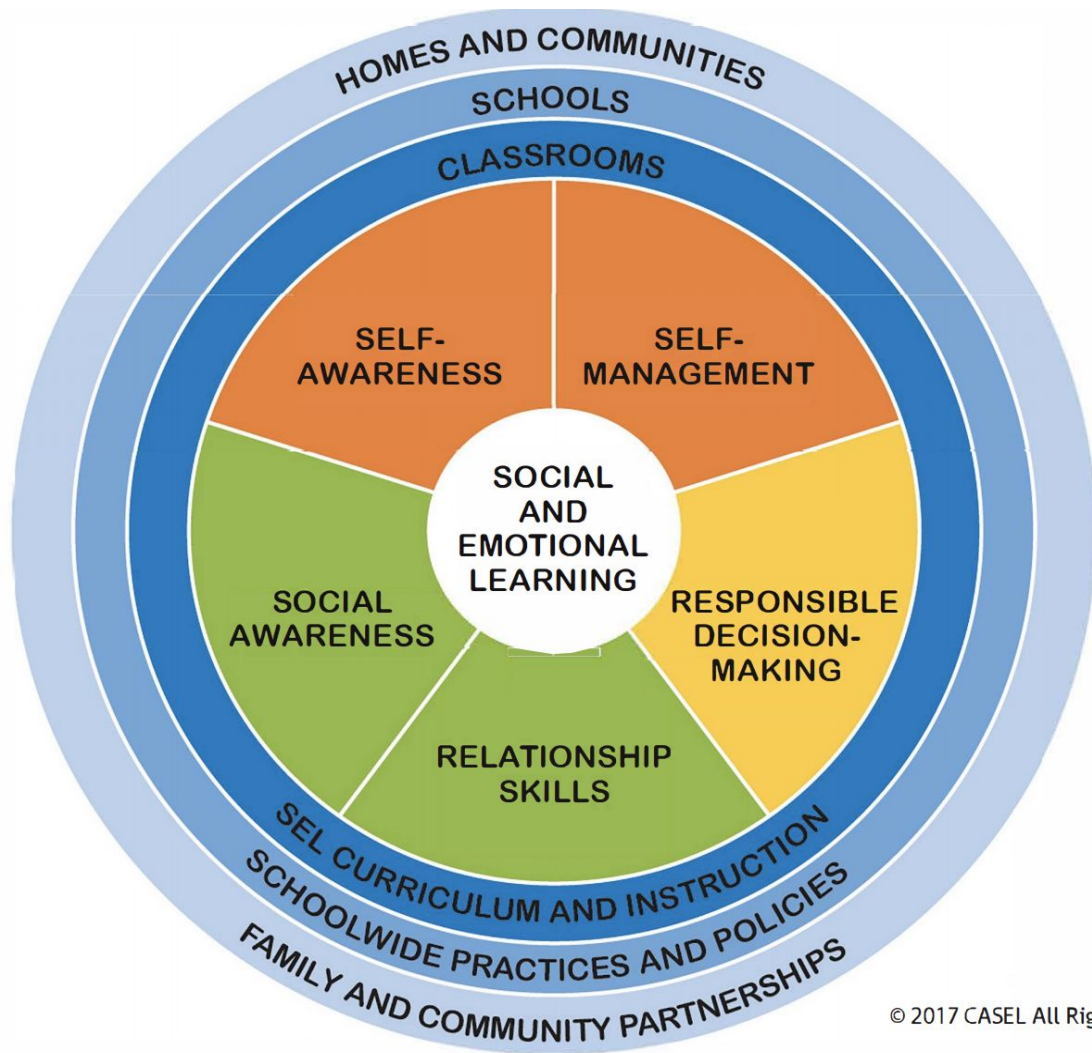
Compelling evidence shows social emotional learning (SEL) **improves learning and life skills**. Educators are also becoming increasingly aware that high numbers of students face trauma that impedes their learning and that understanding and addressing it are critical.

Research shows that programs that support students' development in communicating effectively, negotiating conflict, practicing empathy, understanding their own skills and abilities, managing their emotions and behavior and other social and emotional skills can lead to better academic and life outcomes.(Education Northwest, 2018)

Chicago Public Schools (CPS) has been at the forefront for nearly 20 years in implementing Social and Emotional Learning (SEL) practices in its schools. District leaders have integrated SEL into the district's vision and core school improvement processes. SEL provides a framework for improving school climate, mental health services, discipline practices, and academic

engagement. Despite the success of the implementation of SEL in the past and present school system, there has not been a trauma-informed evidence based interactive program .

SEL COMPETENCIES



APPROACHES TO EFFECTIVE SEL

Effective SEL approaches often incorporate four elements represented by the acronym **SAFE**:

- **Sequenced:** Connected and coordinated activities to foster skills development.
- **Active:** Active forms of learning to help students master new skills and attitudes.
- **Focused:** A component that emphasizes developing personal and social skills.
- **Explicit:** Targeting specific social and emotional skills.

ESSENTIAL SUPPORT FACTOR FOR SCHOOL IMPROVEMENT

1. School leadership
2. Parent-community ties
3. Professional capacity
4. Student-centered learning climate
5. Ambitious instruction.

SCHOOL INFORMATION FROM THE DATA SET

Below is the detailed representation of the School Report Card across all public schools in Chicago for the year 2018-2019.

The link to the data set is as follows:

<https://data.cityofchicago.org/Education/Chicago-Public-Schools-School-Progress-Reports-SY1/dw27-rash>

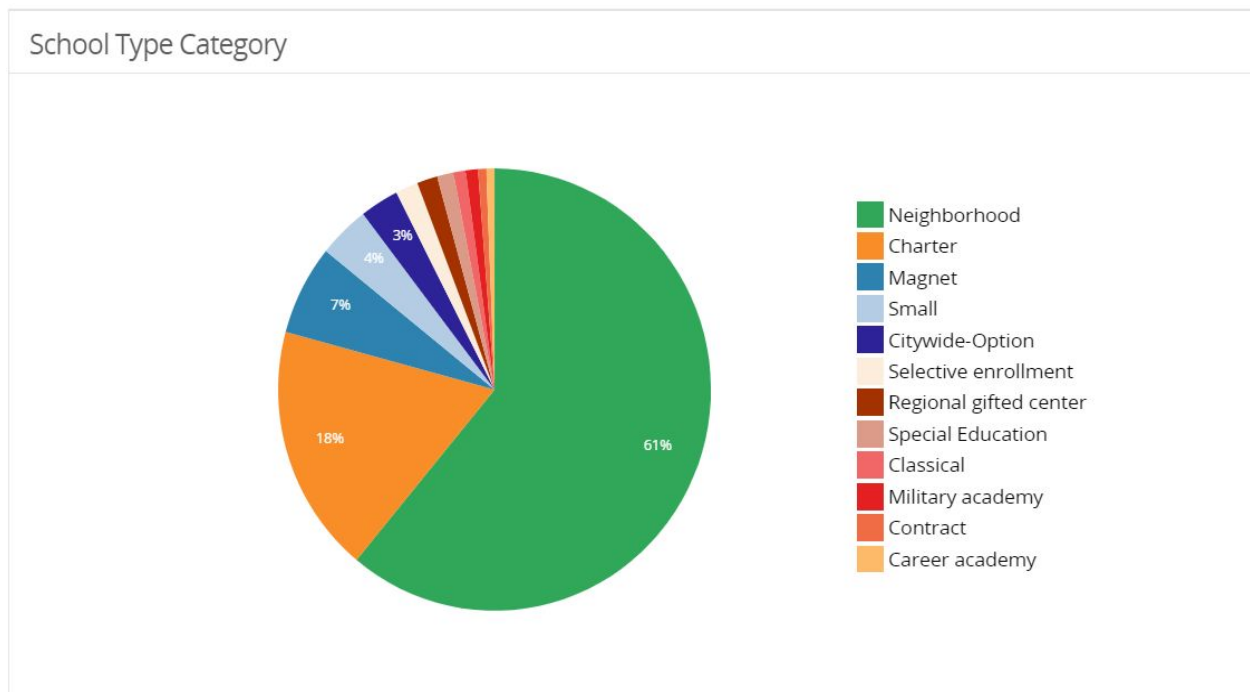
School Type	Participating Schools	Percent of participation
Elementary Schools (ES)	470	71.86%
Middle Schools (MS)	176	26.91%
High Schools(HS)	8	1.22%
Total No of Schools	654	100%

INTERPRETATION

Information through the dataset is collected across all categories of the public schools in Chicago. One of the objectives of the study is to see if we have enough records for the Elementary School data which is our main target group. We could see that the data set contains nearly 470 Elementary School Respondents.

SCHOOL TYPE CATEGORY

This analysis helps us find the most dominant type of school that has been listed in the Chicago Public Schools Progress Report. As shown in the table, Schools are categorised on the basis of their School Type. 61% belong to Neighbour School Category, 18% belong to the Charter Group, 7% belong to Magnet School Category which holds the most data.



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Category	RESPONDENTS	PERCENT
Neighborhood Schools	399	61%
Charter Schools	119	18.19%
Magnet	43	6.5%
City Wide Option	19	2.9%
Selective Enrollment	11	1.68%
Regional Gifted Center	10	1.52%
Special Education	8	1.22%
Classical	6	0.91%
Military Academy	6	0.91%
Contract	4	0.61%
Career Academy	4	0.61%
TOTAL	654	100

Neighbourhood Schools:

Neighborhood public schools are the schools assigned to all nearby children of a certain grade level and are free. These schools are assigned based on the place they live and their physical proximity to the school.

Charter Group:

Charter schools are public schools of choice, chosen by teachers and students. They have the advantage of enjoying freedom from many regulations that apply to traditional public schools. Generally, these schools give more authority to teachers and students to make decisions.

Magnet :

In the U.S. education system, magnet schools are public schools with specialized courses or curricula. "Magnet" refers to how the schools draw students from across the normal boundaries defined by authorities (usually school boards) as school zones that feed into certain schools.

SCHOOL AWARDS IN CHICAGO ARE BASED ON THESE CRITERIA

All the Schools in Chicago are categorized into 4 below basic categories based on how well they respond and adapt the SEL learning:

School Award Description	School Award Name	2015 - 2016 (No. of Schools)	2016-2017 (No. of Schools)	2018-2019 (No. of Schools)
This school has a strong commitment and robust systems to support social and emotional learning (SEL). Documents, observations, and interviews with students, parents, and other members of the school community demonstrate that SEL is a core part of students' experience and the learning environment meets CPS School Climate Standards.	EXEMPLARY	13	31	62
This school has put in place systems and structures to support social and emotional learning (SEL). This may include SEL	ESTABLISHED	4	47	128

action plans, ongoing training for teachers and staff, partnerships with community organizations, time for SEL in the master schedule, and/or targeted and intensive SEL services.				
This school has developed an action plan to support social and emotional learning (SEL). Leaders and staff have assessed their school climate, and they are beginning to adopt best practices to support SEL for all students.	EMERGING	1	97	253
This school has not submitted an action plan to support school climate and SEL.	NOT RATED	648	485	207

THE IMPACTS OF SEL

The data shows that implementing SEL to the curriculum is proven to be beneficial. The data table shows the number of schools adopting the SEL curriculum increases every year.

The following factors showed significant growth in while using SEL in schools:

- Student's academic growth
- Reduced Suspension Rates
- Reduced Misconduct
- School culture climate
- Family involvement
- Effective leadership
- Effective teaching Collaboration

STUDENT ACADEMIC GROWTH RATING

Student Growth compares the impact of a school and/or teacher on the academic growth of his or her students from one year to the next. For this reason, state law (PERA) requires that student growth be a “significant factor” in teacher evaluation.

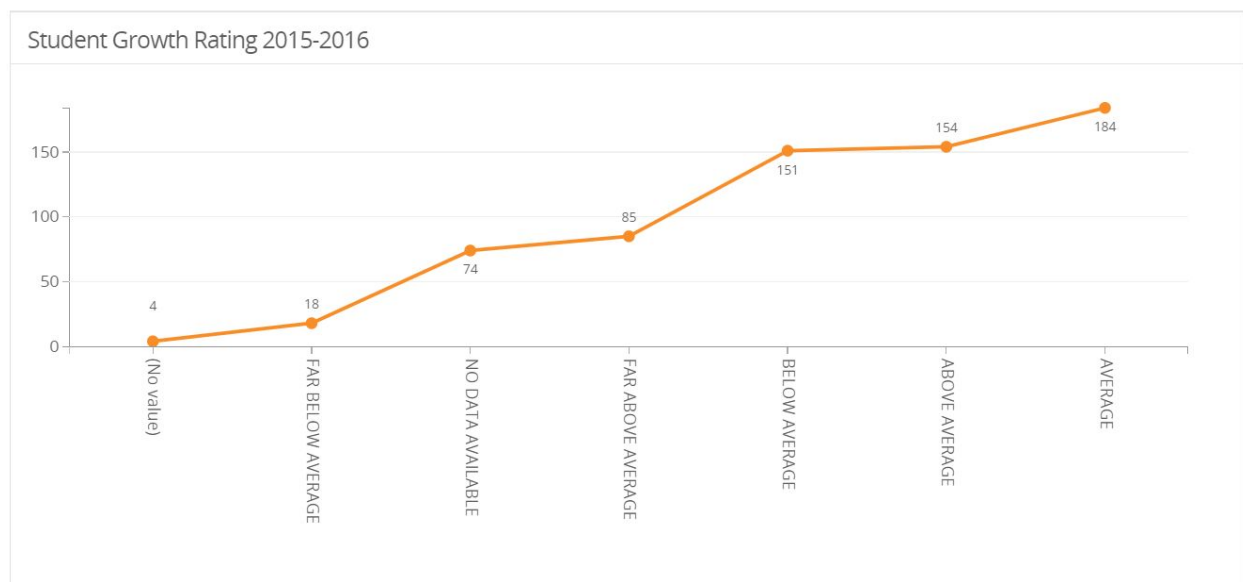
Student Growth is measured in two ways –

- Teacher-Designed Performance Tasks
- Standardized Tests

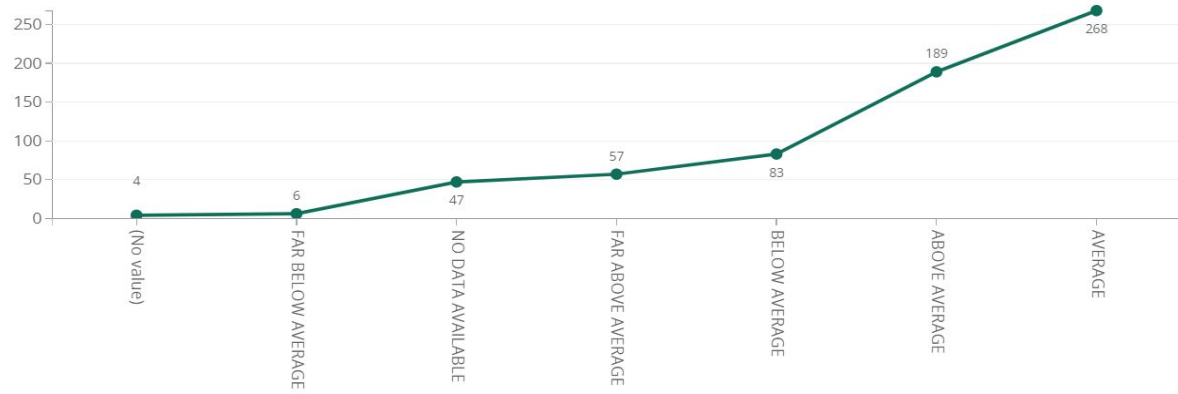
Student Growth Rating 2015-2016 vs Student Growth Rating 2018-2019 across Chicago Public Schools (CPS):

This analysis helps us find the trend of Student growth over the past 4 years.

- There is nearly 22.7% increase in the student growth rate moving more towards the above average category.
- The steady decrease in the other category types also clearly proves that the student growth is at a healthy improving phase and would expect them to reach the “Above average” category soon.



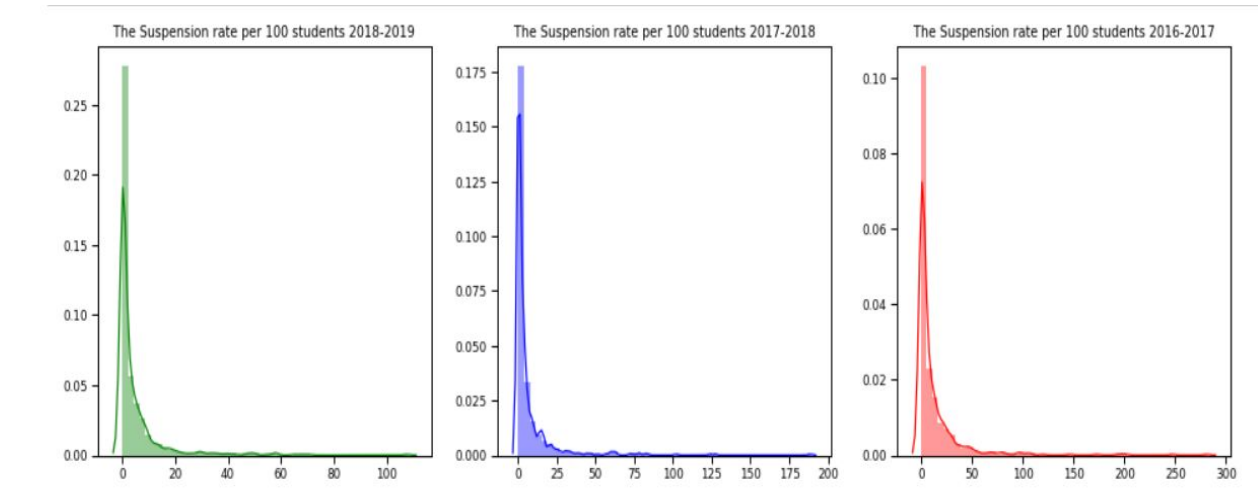
Student Growth Rating 2018-2019



STUDENT GROWTH RATING	RESPONDENTS 2015-2016	RESPONDENTS 2018-2019	PERCENT CHANGE
Above Average	154	189	+22.7%
Average	184	268	+45.6%
Far Above Average	85	57	-32.9%
Below Average	151	83	-54.0%
Far Below Average	18	6	-66.6%
No data Available	74	51	
TOTAL	666	654	

Reduced Suspension Rates :

School Survey on Suspensions and Misconducts :



	School Survey 15-16	Suspension per 100 students	Misconduct Ratio	School Survey 16-17	Suspensions per 100 students	Misconducts Ratio	School Survey 18-19	Suspensions per 100 students	Misconducts Ratio
count	636	494	494	650	509	509	644	518	518
mean	83.14	16.88	52.77	80.25	8.16	23.70	79.97	6.19	23.14
std	21.97	30.06	26.77	24.67	17.0916	21.00	23.92	11.39	21.31
min	0	0.1	1.5	0	0	0	0	0	0
25%	76.9	2.6	30.43	75.85	0.8	8.7	73.88	0.6	7.33
50%	91.25	7.15	50	88.6	2.5	18.2	89.00	2.2	17
75%	98.8	18.88	76.18	95.8	7.8	33.3	94.8	6.58	34.28
max	99.9	281.1	100	99.9	188.7	100	99.9	107.6	100

SCHOOL CULTURE CLIMATE RATING FOR ALL SCHOOLS

School climate refers to the school's effects on students, including teaching practices; diversity; and the relationships among administrators, teachers, parents, and students.

School culture refers to the way teachers and other staff members work together and the set of beliefs, values, and assumptions they share.

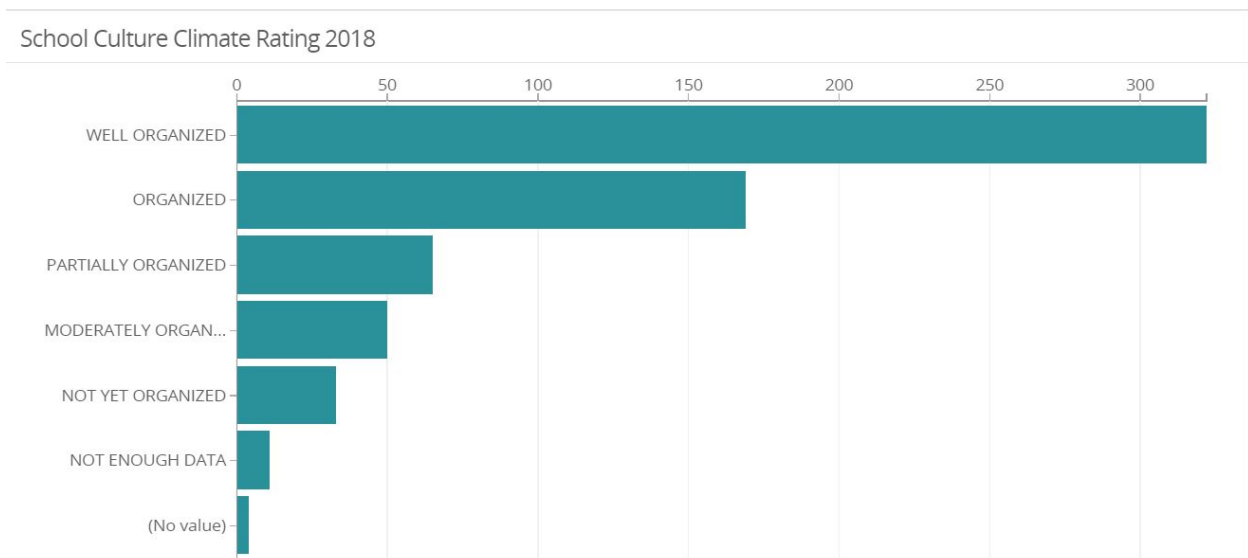
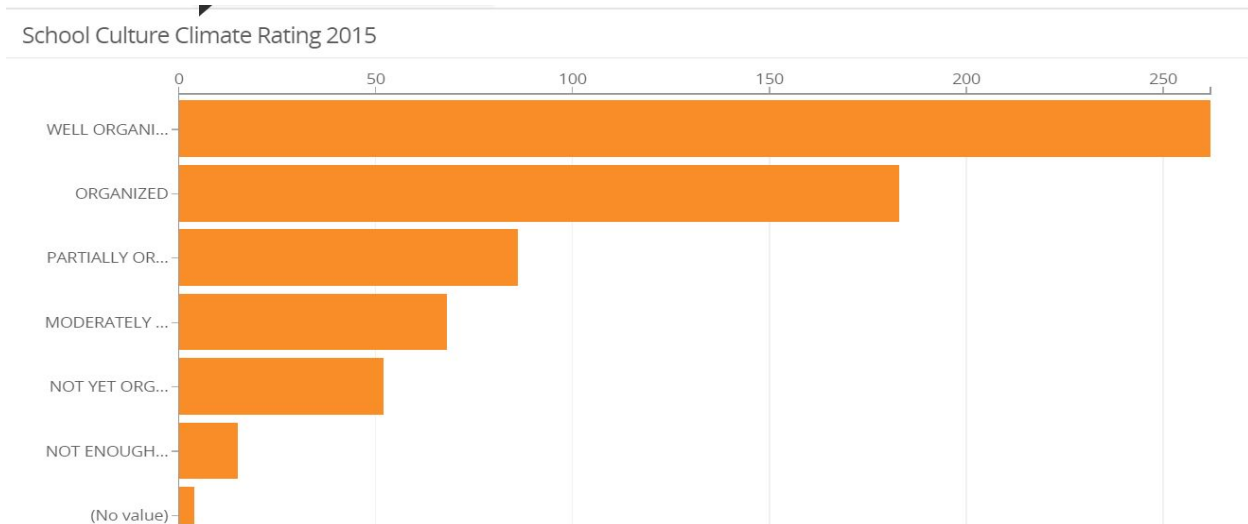
The School Culture Climate is one key indicator for weighing the success of SEL implementation.

This analysis helps us find the School Climate Culture Rating among Chicago Public Schools. Data indicates that the trend is steadily moving over the past 3 years.

- 22.9% of Schools have moved into the category of Well Organized over the past 3 years.

The steady decrease in the other category types also clearly proves that the school system is at a healthy improving phase and would expect them to reach the “Well organized “ category sooner.

School Culture Climate 2015-2016 vs Culture Climate 2018-2019 across Chicago Public Schools (CPS):



School Culture Climate	No. of Schools 2015-2016	No. of Schools 2018-2019	Percentage Change in No. of Schools
Well Organized	262	322	+22.9%
Organized	183	169	-7.6%
Partially Organized	86	65	-24.4%
Moderately Organized	68	50	-26.4%
Not yet Organized	52	33	-5.04%
Not enough data	15	11	-36.5%
TOTAL	666	654	

SCHOOL SURVEY ON FAMILY INVOLVEMENT

This analysis measures the essence of family involvement amongst schools implementing SEL.

- We could see that the number of Schools with family involvement has increased from 95 to 135 over the past 3 years.

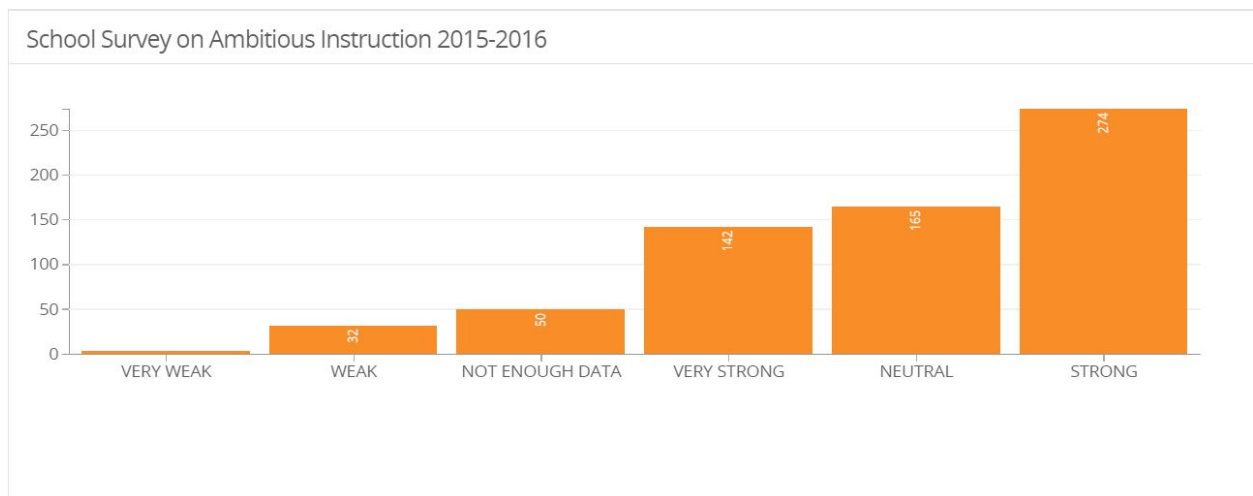
We could see that schools are moving more towards the “Very Strong” and “Strong” Family involvement categories.

Family Involvement Award	2015-2016	2016-2017	2018-2019
Very Strong	95	128	135
Strong	219	255	240
Neutral	205	173	194
Weak	79	61	48
Very weak	23	15	4

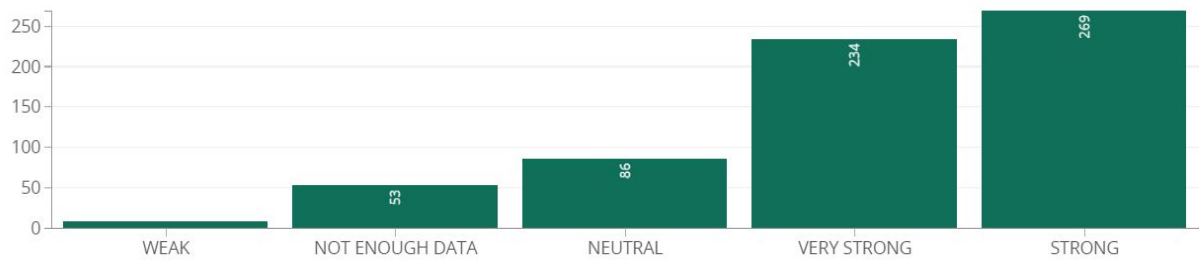
SCHOOL SURVEY ON AMBITIOUS INSTRUCTION

This analysis helps understand the effect of teaching methodology in schools implementing SEL.

- The number of schools with “very strong” teaching methodology has increased from 142 to 234 using SEL.
- Apparently, the number of schools with “weak” teaching methodology has decreased from 32 to 8.



Chicago School Survey on Teaching Instructions 2018-2019



FINDINGS

- ❖ The number of schools adopting the SEL curriculum has increased from 2015 to 2019.

In 2019, nearly 253 new schools have started to adopt SEL and the schools already using SEL have started following it due to its immense positive effects

- ❖ The number of Suspension Rates are reduced from 2015 to 2019.

In 2015 , the number of suspensions was nearly 16 in 100 as of 2019, Suspensions have significantly dropped in schools who have adopted SEL methodology.

- ❖ The student's academic growth rate has improved.

There is nearly 22.7% increase in the student growth rate moving more towards the above average category.

The steady decrease in the other category types also clearly proves that the student growth is at a healthy improving phase and would expect them to reach the “Above average” category soon.

- ❖ The school's cultural climate has improved.

22.9% of Schools have moved into the category of Well Organized over the past 3 years.

- ❖ Teachers have been effective in teaching methodology.

The number of schools with “very strong” teaching methodology has increased from 142 to 234 using SEL.

- ❖ Family involvement has increased.

In 2015 , the number of “Very Strong” family involvement categories was nearly 95 and now in 2019, it has increased to 135 adapting the SEL methodology.

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