the
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**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**



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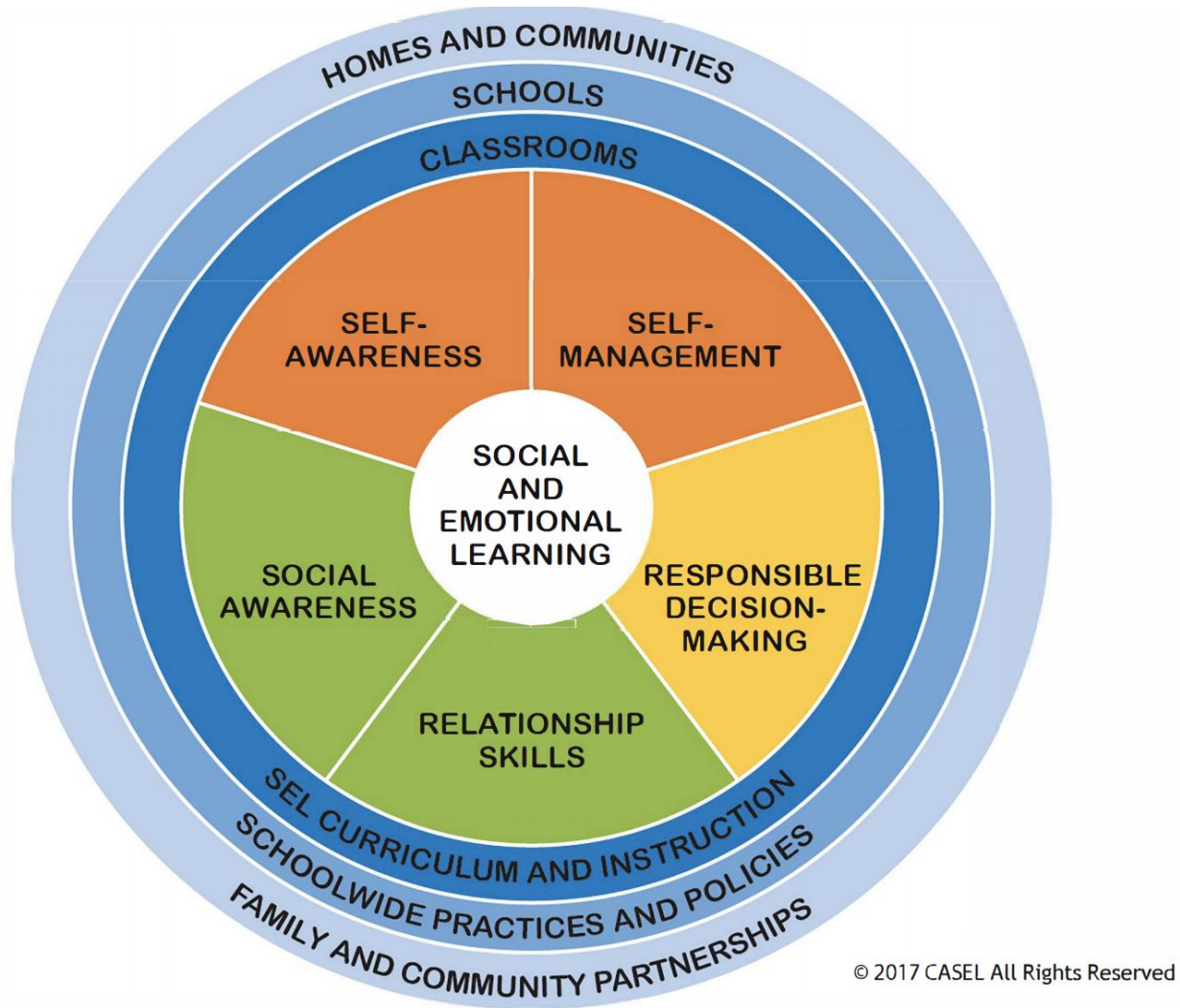
**APPROACHES TO EFFECTIVE SEL**

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.
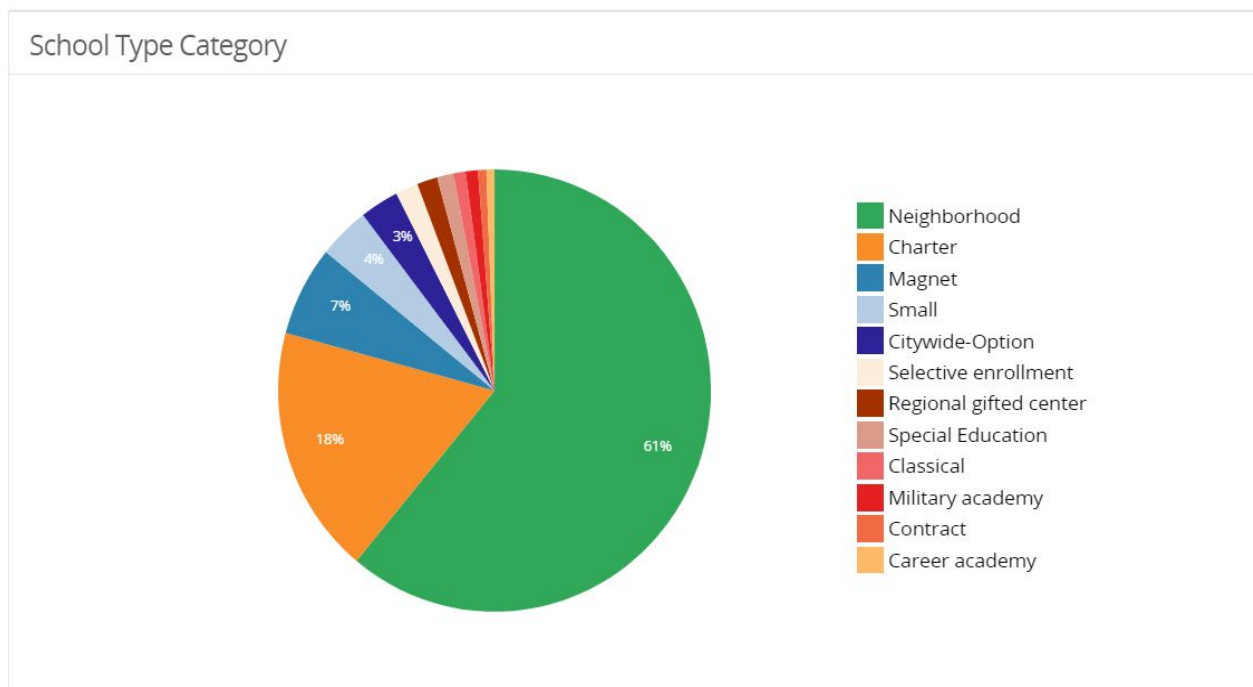
| Category | RESPONDENTS | PERCENT |
|---|---|---|
| Neighborhood Schools | 399 | 61% |
| Charter Schools | 119 | 18.19% |
| Magnet | 43 | 6.5% |
| City Wide Option | 19 | 2.9% |
| Selective Enrollment | 11 | 1.68% |
| Regional Gifted Center | 10 | 1.52% |
| Special Education | 8 | 1.22% |
| Classical | 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). | ESTABLISHED | 4 | 47 | 128 |

| | | | | |
|---|---|---|---|---|
| This may include SEL 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.
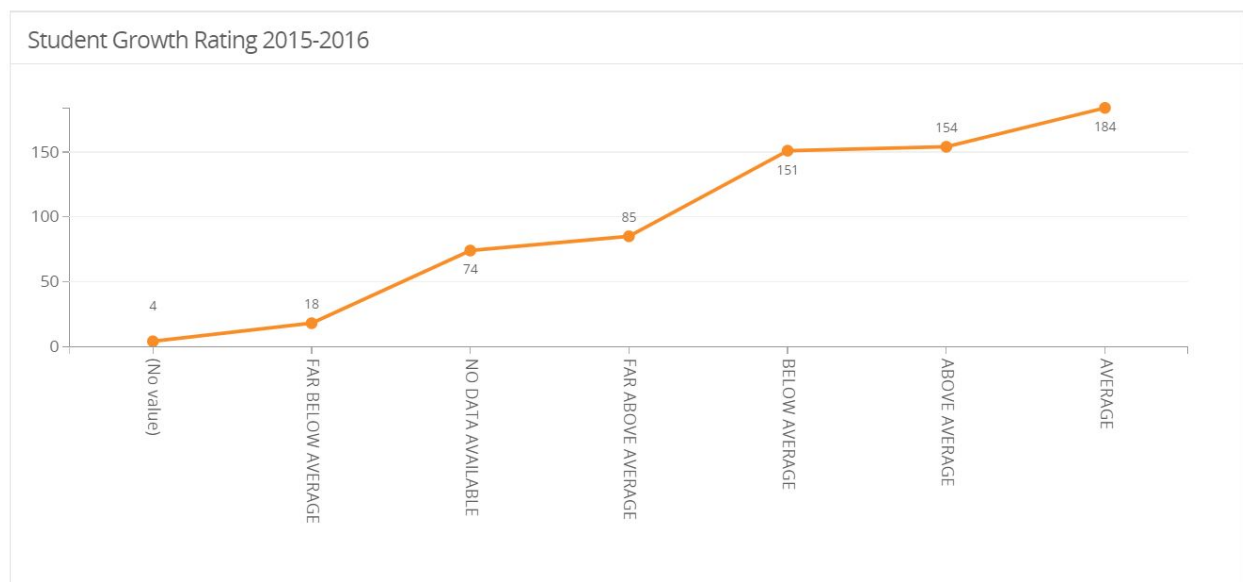
Student Growth is measured in two ways –

- Teacher-Designed Performance Tasks
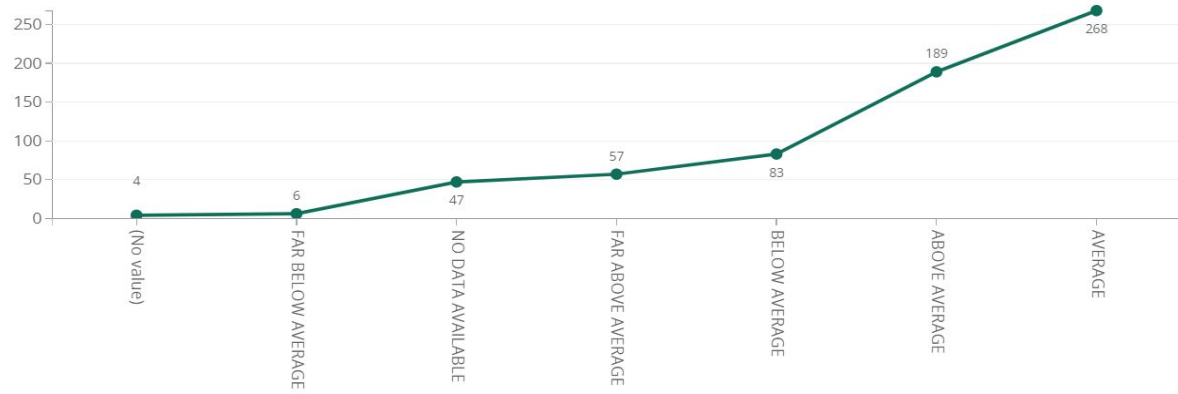- Standardized Tests

**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 2015-2016

## Student Growth Rating 2018-2019



| Category | Value |
|---|---|
| (No value) | 4 |
| FAR BELOW AVERAGE | 6 |
| NO DATA AVAILABLE | 47 |
| FAR ABOVE AVERAGE | 57 |
| BELOW AVERAGE | 83 |
| ABOVE AVERAGE | 189 |
| AVERAGE | 268 |

| 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 :
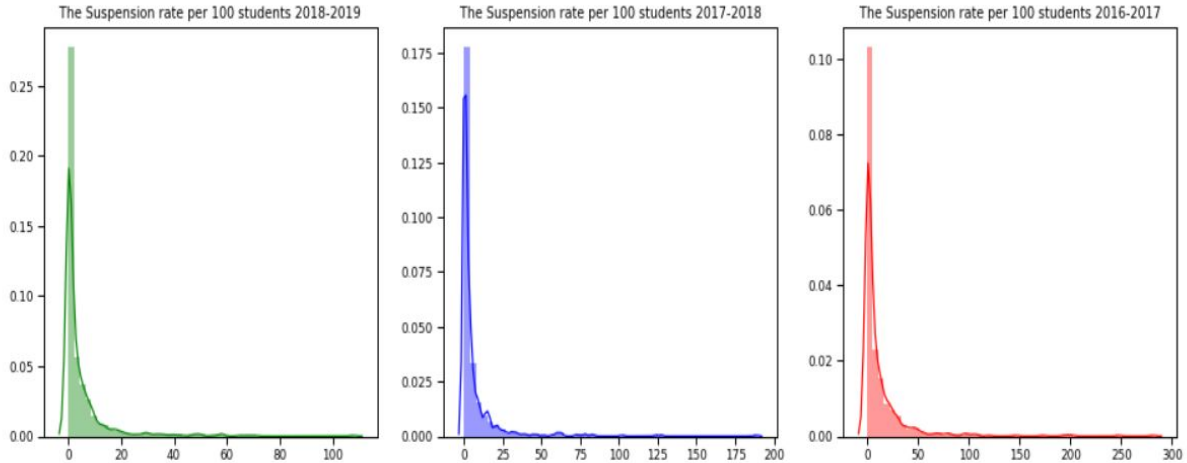


| | School Survey 15-16 | Suspension per 100 students | Misconduct Ratio | School Survey 16-17 | Suspensions per 100 students | Misconducts Ratio | School Survey 18-19 | Suspensions per 100 students | Misconducts Ratio |
|---|---|---|---|---|---|---|---|---|---|
| **count** | 636 | 494 | 494 | 650 | 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 Rating 2015



School Culture Climate Rating 2018
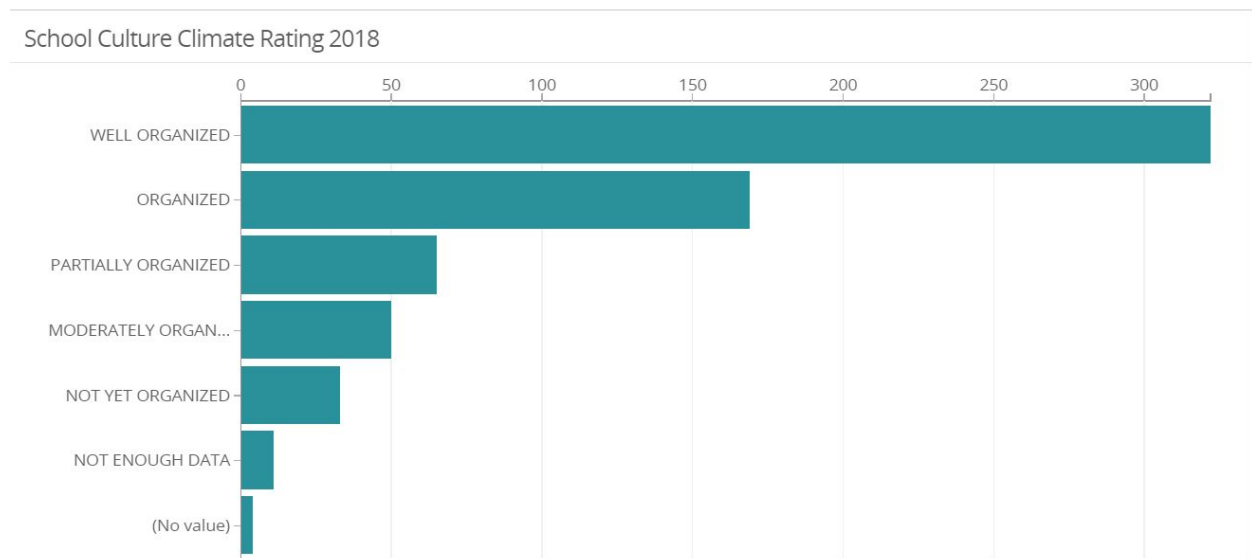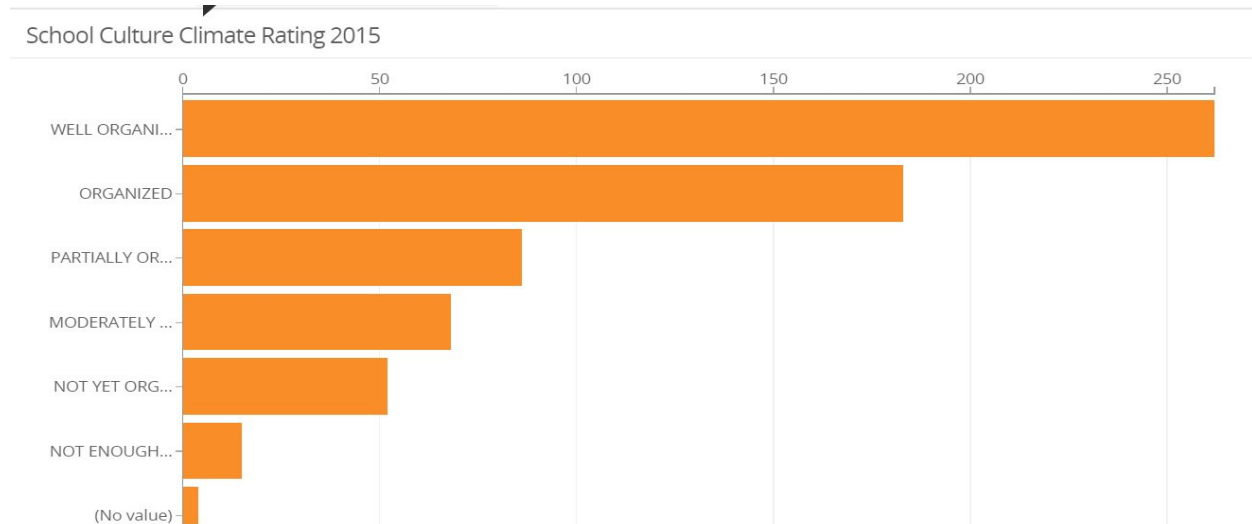
| School Culture Climate | No. of Schools 2015-2016 | No. of Schools 2018-2019 | Percentage Change in No. of Schools |
|---|---|---|---|
| Well Organized | 262 | 322 | +22.9% |
| Organized | 183 | 169 | -7.6% |
| Partially Organized | 86 | 65 | -24.4% |
| Moderately Organized | 68 | 50 | -26.4% |
| Not 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.
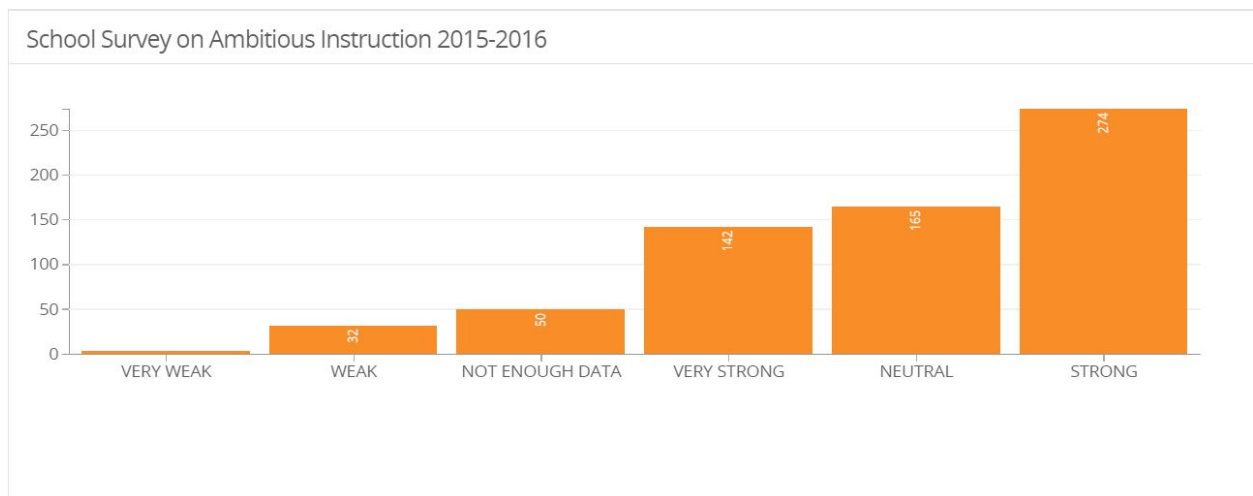
We could see that schools are moving more towards the "Very Strong" and "Strong" Family involvement categories.

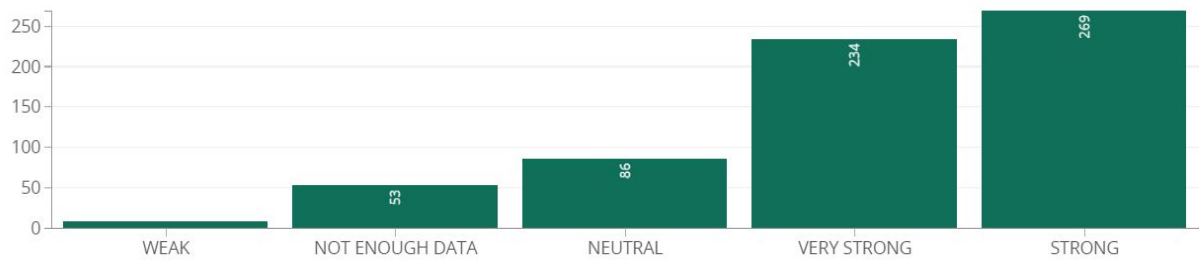| Family Involvement Award | 2015-2016 | 2016-2017 | 2018-2019 |
|---|---|---|---|
| Very Strong | 95 | 128 | 135 |
| Strong | 219 | 255 | 240 |
| Neutral | 205 | 173 | 194 |
| Weak | 79 | 61 | 48 |
| Very weak | 23 | 15 | 4 |

## 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.

School Survey on Ambitious Instruction 2015-2016

# Chicago School Survey on Teaching Instructions 2018-2019



| | WEAK | NOT ENOUGH DATA | NEUTRAL | VERY STRONG | STRONG |
|---|---|---|---|---|---|
| Value | | 53 | 86 | 234 | 269 |

**<u>FINDINGS</u>**

- ❖ 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 immerse 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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