

Technical Notes:

Changes to Ingenuity's Creative Schools Certification

Introduction

Much has changed in the 10 years since Ingenuity's founding and the subsequent creation of the initial Creative Schools Certification (CSC). The Certification is changing too. Starting in our reporting on the 2021-22 school year, Ingenuity will be using an updated CSC 2.0, which reflects improvements in our ability to track arts offerings in detail, updates to our thinking about the key factors that make a quality arts education possible, and new ideas about how to translate the elements of the CSC into a plan for school improvement.

The CSC scoring system and its supporting data continue to lie at the core of Ingenuity's work of supporting equitable access to arts education. As both Ingenuity and CPS continue to collaborate and expand capacity to support arts education across Chicago, CSC 2.0 will help all stakeholders better understand the needs of all schools, identify specific opportunities for improvement, and encourage all actors to invest in equitable access to arts education throughout the District. The CSC 2.0 score schools receive will now, more than ever, trigger action and support for improvement.

Process

The transition from the original CSC to CSC 2.0 began in 2018, with the decision to begin leveraging the administrative data on course usage collected by CPS. Over the next two years, Ingenuity and CPS held interviews, focus groups, and regular conversations with multiple

¹ Due to the COVID-19 pandemic, CPS <u>announced</u> it is suspending the School Quality Rating Policy (SQRP) during the 2019-20 and 2020-21 school years as it reimagines how accountability functions in CPS. Following this precedent, Ingenuity and the CPS Department of Arts Education (DAE) will not publicly release school-level Creative Creative Schools Certification (CSC) ratings for the 2019-20 and 2020-21 school years.

stakeholders to design and implement new data collection and analysis strategies that take advantage of this wealth of administrative data.

Along the way, Ingenuity and CPS also collaborated together and with other stakeholders to revisit several elements of the CSC, with the aim of making the scoring rubric more equitable and into a better tool for identifying gaps and opportunities in arts education. CSC 2.0 is the product of that effort.

What's changed: Overview

The original CSC comprised two main parts: Phase 1 focused on measures of school success in providing students with access to the arts while Phase 2 focused on other supports that mark a strong arts program. Phase 1 included measures of staffing, minutes of instruction, access to arts courses, and the disciplines taught and depth of instruction in those disciplines. Phase 2 was a series of yes-no data fields that included indicators of schools using arts integration, partnering with outside arts organizations, providing opportunities for parent and community engagement with the arts, school participation in professional learning in the arts, and school budgeting for the arts. Scores for schools that did not indicate yes to at least three Phase 2 indicators would be reduced by one level.

What previously made up Phase 1 of the scoring rubric are now referred to as measures of Access. Though there are some important changes to the measures, discussed in detail below, the Access measures still capture student access to the arts through arts instructor staffing levels, minutes of instruction and the share of students who have access to the arts (among elementary schools), and the number of disciplines and depth of instruction offered in those disciplines (among high schools).

The elements that previously made up Phase 2 of the scoring rubric, as well as several additions, are now part of the Quality section of CSC 2.0. These Quality measures still include indicators of schools partnering with outside arts organizations, providing opportunities for parent and community engagement with the arts, school participation in professional learning in the arts, and school budgeting for the arts. There are also new opportunities for schools to make resource-neutral improvements to their school arts programs (e.g., by including arts in their school governance) and get credit toward their final CSC score for doing so. Additionally, CSC 2.0 increases the *weight* attached to measures of Quality: schools now have the ability to improve their scores by making arts-positive changes beyond adding basic resources. This is addressed in greater detail below.

What's changed: Details

Each of the changes that were implemented in the transition from the original CSC to CSC 2.0 can be classified in one of three categories:

- Changes to classification of data elements
- Changes to data collection and calculation of values
- Changes to rubric for calculating final CSC scores

The specific changes in each category are outlined below. As a reference, links to summary descriptions of both the original CSC and CSC 2.0 are here:

- Original CSC: http://www.ingenuity-inc.org/wp-content/uploads/2021/09/CSC_old_rubric.pdf
- CSC 2.0: http://www.ingenuity-inc.org/wp-content/uploads/2021/08/INGTY CSC Scoring.pdf

Changes to classification of data elements

As discussed in What's changed: Overview, one key difference between the original CSC and CSC 2.0 is in the way the two scoring rubrics classify the main elements that make up the score.

The original CSC comprised two main parts: Phase 1 focused on measures of school success in providing students with access to the arts while Phase 2 focused on some of the other supports that mark a strong arts program. What previously made up Phase 1 of the scoring rubric are now referred to as measures of Access. These are very similar to the Phase 1 measures. The elements that previously made up Phase 2 of the scoring rubric, as well as several additions, are now part of the Quality section of CSC 2.0. A complete list of the elements that make up each version of the CSC is provided below.

ORIGINAL CSC	CSC 2.0
PHASE 1:	ACCESS:
 Staffing Minutes Percent Access Disciplines & Depth PHASE 2:	 Staffing Minutes Percent Access Disciplines & Depth QUALITY:
 Partnerships Parent/Community Engagement Budget Professional Learning Arts Integration 	 Partnerships Parent/Community Engagement Budget Professional Learning Instructional Approach Learning Standards School Governance

In terms of what is being measured to reflect the Quality of arts education, two primary differences exist between the original CSC and CSC 2.0. First, the measure of arts integration in the original CSC has been replaced by a more general measure of a school's "Instructional Approach," which refers to the way(s) a school implements its arts instruction.² Arts integration is one possible instructional approach, but it no longer stands alone, and instead is now recognized as one among several possible appropriate and valuable approaches to instruction in the arts. Others include single-discipline arts instruction, aesthetic education, and STEAM.

A second difference is in the addition in CSC 2.0 of measures of a school's use of learning standards and of the arts' inclusion in mechanisms for school governance. These measures are relatively heavily weighted among the Quality measures because they are understood to have great potential to ensure student access to quality arts programming.

By defining both Access and Quality measures, CSC 2.0 is intended to highlight that there are a multitude of factors that affect and even can determine the quality of arts education programming a school makes available to its students. Importantly, the measures of Quality are, by and large, resource neutral. For example, schools do not need to devote additional financial resources to the arts to make the decision to include the arts in mechanisms for school governance. CSC 2.0 is intentionally designed to be a more equitable approach: both shining a light on the reality of arts education in schools and rewarding the arts-positive decisions even the most under-resourced schools make on behalf of their students.

The remainder of this document provides a detailed discussion of changes in the scoring elements themselves as well as changes in the way these elements are aggregated to generate an overall score.

Changes to data collection and calculation of values

In addition to the high-level structural change from Phase 1 / Phase 2 to Access / Quality as the framing of the CSC, Ingenuity also made important changes to data collection and the calculation of individual elements of the rubric. In this section, we first describe in more detail the data collection processes and calculation methods for Phase 1 measures in the original CSC. We then show how these processes and methods have changed in the Access portion of CSC 2.0.³

² Please see the complete description of the <u>original CSC</u> and <u>CSC 2.0</u> for a more detailed view of how each of these elements were and are measured.

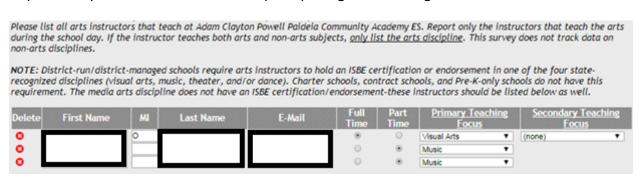
³ These changes to data collection did not affect any Quality measures.

Original CSC

Staffing

The goal of the staffing portion of the CSC, old and new, has always been to assess the extent to which schools are adequately staffing in the arts. The importance of this measure reflects the critical role that certified and endorsed arts instructors play in providing quality instruction.

Information on arts instructors was collected through a combination of administrative data provided by CPS and Survey responses provided by Arts Liaisons in schools. Information on arts staff was then used to pre-populate schools' Surveys. Liaisons added to or changed the staff list on the Survey; Ingenuity then reviewed these changes. For the vast majority of entries, the instructor lists aligned across the administrative and Survey data sources. If CPS identified an arts instructor from a school that did not complete the Survey, Ingenuity included that instructor in the total count of arts FTEs (Full Time Equivalent). Arts instructors identified only in the Survey data, but not on file with CPS, were researched further and included if they could be confirmed to be arts instructors. All instructors at Charter and Contract schools were self-reported by Arts Liaisons, and Ingenuity reviewed data from ISBE and other sources in any questionable cases. Survey respondents provided this information by completing the following table:



In the analysis of data from the 2018-19 school year, and all years prior, the staffing ratio was calculated based on the FTE Ingenuity received for each instructor. The instructor's full-time / part-time status determined the number of credits a school would receive for that instructor (full-time = 1.0 FTE; part-time = 0.5 FTE). The staffing ratio was then simply the sum of a school's FTE values divided by school enrollment.

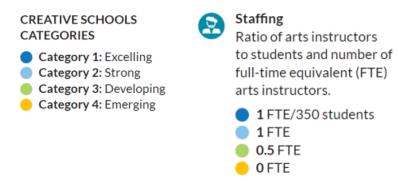
$$arts instructor n = N$$

$$\sum_{arts instructor n = 1} FTE$$

$$students enrolled$$

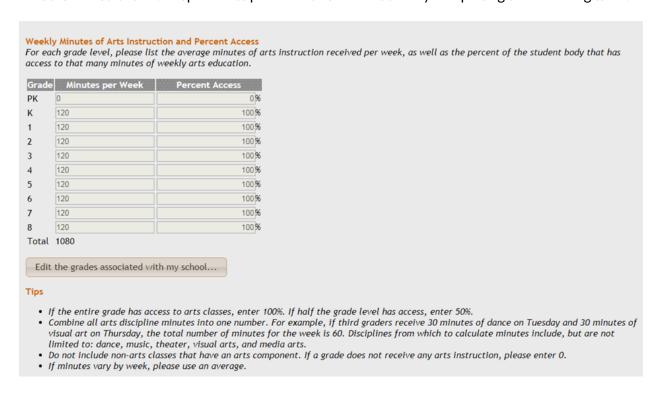
These school-level staffing numbers then determined how schools would be rated using the following rubric:

⁴ Please see the Data Notes section from any <u>State of the Arts</u> report for a detailed discussion of the treatment of staffing data in each year.



Minutes & Access

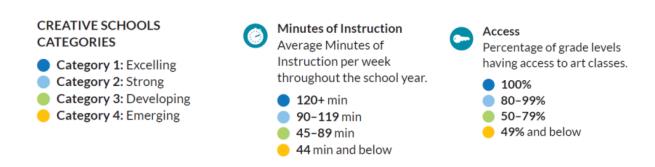
Prior to the collection of data on the 2018-19 school year, Ingenuity collected data on elementary school minutes of instruction and access to the arts only through its annual artlook® Survey. Survey respondents were asked to provide grade-level estimates of average minutes of arts instruction per week as well as the percent of students within the grade that had access to those minutes of instruction. Respondents provided this information by completing the following table:



To calculate the school's Minutes of Instruction value for scoring purposes, Ingenuity would simply calculate the average minutes of instruction across all grades (minus Pre-K) that were taught in the school. In the example posted above, the school's Minutes of Instruction would be:

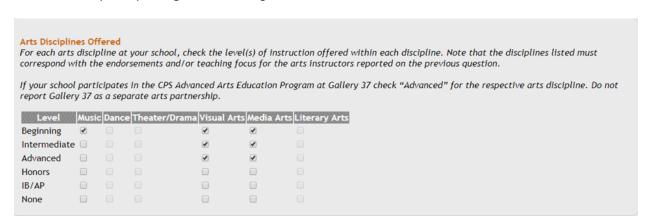
$$\frac{\sum_{K} minutes \ per \ week \ per \ grade}{grades \ in \ school} : \frac{120 + 120 + 120 + 120 + 120 + 120 + 120 + 120}{8} = 120 \ minutes \ per \ week$$

The same calculation applied to a school's Percent Access measure, which in the example above would be 100%. These school-level averages were then translated into final CSC scores for each element using the following rubric:



Disciplines & Depth

Prior to the 2018-29 school year, Ingenuity used a school-level approach for high school measures of Disciplines & Depth in which Survey respondents were asked to identify presence or absence of arts instruction for their students, by discipline and by depth. Respondents provided this information by completing the following table:



To calculate a school's overall Disciplines & Depth, Ingenuity would count the number of disciplines in which coursework at any level was offered (the number of columns that include at least one checkmark) and the number of those disciplines that offered coursework at multiple levels (the number of columns that have more than one check mark). These checkmarks were then translated into final CSC scores for each element using the following rubric:

CREATIVE SCHOOLS CATEGORIES

- Category 1: ExcellingCategory 2: Strong
- Category 3: Developing
- Category 4: Emerging
- Disciplines and Depth
 Number of disciplines
 offered and number of levels
 per discipline.
 - 3+ multi-level disciplines offered
 - 3 disciplines offered
 - 2 disciplines offered
 - 0 or 1 disciplines offered

CSC 2.0

In 2019-20, when conducting the Survey of the 2018-19 school year, Ingenuity still collected and reported on Staffing, Minutes of Instruction, Percent Access, and Disciplines & Depth using this methodology. At the same time, Ingenuity also pilot tested a collection platform that leveraged new abilities to pre-populate the school Survey using District data on staffing, course-level information, and school enrollment.

Staffing

The process for collecting and auditing data on instructors is largely the same under CSC 2.0 as it was under the original CSC. Information on known instructors is gathered from CPS administrative sources, where possible, and that information is used to pre-populate the Survey and is editable by the Survey respondent.

However, one important difference has been implemented beginning with the 2019-20 school year. The change is the result of a recognition that arts instruction in elementary schools is also provided in some cases by classroom teachers. With this in mind, Ingenuity asked Arts Liaisons to indicate instructors teaching the arts who were classroom or non-arts teachers. Respondents provide this information by completing the following table:

Who taught arts courses at your school in 2020-21?

We may have already collected some information about the instructors that taught arts courses at your school from your local school district or state department of education. Please add any instructors who are missing from this list. For each instructor listed, please provide full-time/part-time status and disciplinary focus(es). Please only include instructors that taught art courses during the school day; do not include individuals from outside your school, such as teaching artists. All responses will be reviewed for accuracy.

Click here for additional tips and guidelines for reporting arts teachers.

Instructor	Instructor	Part/Full	Primary	Secondary	Classroom/Non-	Email
First Name	Last Name	Time	Focus	Focus	Arts Teacher	
		S 🗸	S 🗸	N 🗸		×

This data on arts instructors and classroom / non-arts teachers who provide arts instruction in elementary schools is then used to calculate each school's staffing ratio, with arts instructors receiving full credit for their FTE value and classroom / non-arts teachers receiving 10% credit for their FTE value:

$$\begin{array}{c|c} \textit{arts instructor } n = N & \textit{classroom / non-arts instructor } n = N \\ \hline \sum & \textit{FTE} + \sum & \textit{FTE} * 0.1 \\ \hline \textit{arts instructor } n = 1 & \textit{classroom / non-arts instructor } n = 1 \\ \hline & \textit{students enrolled} \\ \hline \end{array}$$

These school-level staffing numbers are then translated into final CSC scores using a different rubric than was used previously. The original CSC was inequitable in that it was potentially disadvantageous to smaller schools. Schools with a smaller student body may require fewer arts instructors to meet student needs. Under the original CSC, a smaller school that could meet most student arts needs with a half-time arts teacher could not be rated higher than Developing unless they met the 1:350 teacher-student ratio required to be rated Excelling.

To address this equity issue, CSC 2.0 is based at rating levels on the ratio of students to arts instructors. The smaller school with only a half-time arts instructor could, under this new rubric, have a teacher-student ratio that results in a rating of Strong.

Score	Students per Arts Teacher	
Excelling	350 or fewer	
Strong	351-600	
Developing	601-1000	
Emerging	More than 1000	

Minutes & Access

With this new data collection approach, Ingenuity uploads administrative data on courses into artlook® and then asks elementary school Survey respondents to provide estimates of the minutes of instruction per week on a class section-by-class section basis:

What was the average weekly minutes of instruction provided for each arts class section at your school in 2020-21?

We may have already collected some information about the arts classes offered at your school from your school district or state department of education. Please add any classes that are missing from this list. For each class section, provide the average weekly minutes of arts instruction across the 2020-21 school year, and (if not pre-populated) the student enrollment in each section. All responses will be reviewed for accuracy.

Click here for additional information.

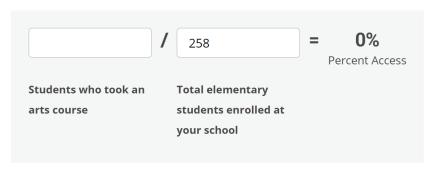
Class Number	Class Name	Discipline	Students Enrolled	Average Minutes per Week
9050000-1	MUSIC STANDARDS HR-A220	Music	30	
9050000-1	MUSIC STANDARDS HR-A221	Music	28	
9050000-1	MUSIC STANDARDS HR-A224	Music	24	
9050000-2	MUSIC STANDARDS HR-A205	Music	20	
9050000-2	MUSIC STANDARDS HR-A225	Music	23	
9050000-2	MUSIC STANDARDS HR-A226	Music	12	

This table doesn't provide the needed information to understand what share of students in a school have access to the arts in general. While we do have data on students enrolled in each course, because we do not collect student-identifying information, we cannot tell which students are enrolled in which courses.

As such, Ingenuity now uses a separate question to estimate the percent of students with access to the arts. Again, Ingenuity uploads information on total school enrollment to populate a question that simply asks for the number of students in a school who enrolled in at least one arts class:

What percentage of students took at least one arts class in any discipline at your school in 2020-21?

Please provide the number of students at your school who completed at least one arts class during the school day and your school's total elementary student enrollment. We may have already obtained this information through student enrollment data from your local school district or state department of education. If this information is not already pre-populated, please use the blank space(s) below to report your school's percent access.



The change in approach to data collection has required a change to the method used for calculating each school's overall average Minutes of Instruction and Access scores.

To estimate the average minutes of instruction a school offers, Ingenuity calculates the total minutes of instruction per week for each class by multiplying the number of students enrolled in the class by the average minutes per week of instruction in that class. This can be thought of as the number of student-minutes of instruction "received" per week for that class. When summed across all classes, we get the total number of student-minutes of instruction "received" for all classes. The school's average minutes of instruction per week is then divided by the number of students who took an arts course, as provided in the Survey, to arrive at a measure of the average minutes of instruction for the students in the school that took at least one arts class.

$$\sum_{\substack{\text{class } n = 1\\ \text{students enrolled in at least one arts course}}} \min_{\substack{\text{class } n = 1\\ \text{students enrolled in at least one arts course}}$$

The calculated values for average minutes of instruction per week and percent of students with access to at least one arts course are, in CSC 2.0, rated on the same scale as is used in the original CSC:

Score	Average Weekly Minutes of Instruction	Percent Access
Excelling	120 or more	100%
Strong	90-119	80%-99%
Developing	45-89	50%-79%
Emerging	Fewer than 45	Less than 50%

Disciplines & Depth

The approach to data collection in high schools is very similar to elementary schools under this new approach to data collection. The only difference between the two is that, for high school courses, the Survey collects information about the depth of instruction for each class section rather than the average minutes of instruction:

What arts disciplines and levels of instruction were offered at your school in 2020-21?

We may have already collected some information about the arts courses offered at your school from your school district or state department of education. Please add any courses that are missing from this list. For each course, please select the instructional depth that best describes the course. All responses will be reviewed for accuracy.

Click here for additional information.

Class Number	Class Name	Discipline	Students Enrolled	Instructional Depth
003101R	RS1 Metalsmithing I	Visual Arts	64	
005101H	HS1 Adv Textile Fiber Art I	Visual Arts	127	
005231H	HS1 Adv Textile FiberArt 2	Visual Arts	26	

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The high school Disciplines & Depth measure was designed to provide a roadmap to high schools for improvement by encouraging sequential instruction in multiple arts disciplines. However, the original CSC more heavily weighted the number of disciplines offered than the depth of instruction. In light of the fact that there are often greater barriers to adding a discipline than there are to adding depth of instruction (the cost of starting a program in an entirely new discipline is typically higher than the cost of adding additional coursework within a discipline that is already available in the school), the original CSC scoring rubric was disadvantageous to lower-resourced schools, smaller schools, and schools with less physical space.

The Disciplines & Depth measure under CSC 2.0 has been changed to address these barriers. Scores on this measure are based on the number of disciplines offered (one Disciplines & Depth Point for each) and the depth of instruction for each discipline (one additional Disciplines & Depth Point if multiple levels of instruction are offered for a discipline). A high school that offers coursework in four disciplines, but doesn't offer sequential instruction in any of them, will receive the same number of Disciplines & Depth Points as a school offering multi-level coursework in two disciplines. The value of increasing the depth of instruction is now similar to the value of adding a new discipline. High schools are now rated using the following rubric:

Score Discipline Depth Poi		
Excelling	6 or more	
Strong	3-5	
Developing	2	
Emerging	Less than 2	

Combination Schools

In the original CSC, combination schools (i.e. schools with both K-8 and 9-12 grades served) were provided with two separate Surveys. In one the respondents were asked to complete the elementary school questions about minutes of instruction and access to the arts, while in the other respondents were asked to complete the high school questions about disciplines & depth.

Under the new CSC 2.0, combination schools complete a single Survey, which includes both pre-populated elementary and high school questions.

With these changes to using class-section-level data rather than grade-level data, Ingenuity also needed to rethink how to calculate, on a year-by-year basis, the credit a school should receive toward its overall CSC score for each of these rubric elements (Minutes of Instruction; Percent Access; Disciplines & Depth).

Changes to rubric for calculating final CSC scores

Perhaps the most visible and important difference between the original CSC and CSC 2.0 is in how individual elements are aggregated into an overall final score. Under the original CSC, schools were scored on each of their Phase 1 elements individually. The *lowest* of these scores became their preliminary score. In Phase 2, schools answered yes-no to each of the five Phase 2 elements. If a school answered "no" to three or more, that school's final score would be reduced by one level; otherwise, the school's Phase 1 score determined the final score. Note that under this scoring rubric, a school's final score could *only* be lower than that school's preliminary score, though this rarely happened, based on their Phase 2 responses.

CSC 2.0 approaches calculation of final scores differently. Final scores are based on a point scale in which 100 points is the maximum score possible. Each element in the rubric has a weighting relative to this point total, and a school's responses to each element determine the share of that total the school receives. The final score is then simply the sum of the points a school received for each of its elements. Final score ratings are based on a distribution familiar to many educators: Excelling (90-100); Strong (80-89); Developing (70-79); Emerging (<70); Incomplete Data (did not complete), as shown below:

OVERALL SCORES

Here's how scores get converted to ratings (the grading scale).

CSC Rating	CSC Points	
Excelling	90-100 Points	
Strong	80-89 Points	
Developing	70-79 Points	
Emerging	Fewer than 70 Points	
Incomplete Data	Did Not Complete Survey	

While the elements that make up the Access portion of CSC 2.0 are still more heavily weighted than are the elements that make up the Quality portion of the rubric (Access and Quality are weighted at 64 and 36 points, respectively), they are no longer as determinative of a school's final score. Nor is any single element as limiting; for example, a school that scores "Strong" on its staffing measure may now receive a final score of "Excelling" if it performs well on other Access measures and on the Quality measures.

The changes described here are summarised in the following graphic:

ORIGINAL CSC	CSC 2.0
PHASE 1: Staffing Minutes Percent Access Disciplines & Depth Each element was scored on the CSC rating scale: 1: Excelling, 2: Strong, 3: Developing, 4: Emerging PHASE 2: Partnerships Parent/Community Engagement Budget Professional Learning Arts Integration	ACCESS: Staffing Minutes Percent Access Disciplines & Depth Each element is awarded a point value based on its score on the CSC rating scale: Excelling, 2: Strong, 3: Developing, 4: Emerging QUALITY: Partnerships Parent/Community Engagement Budget Professional Learning Instructional Approach Learning Standards School Governance
FINAL SCORE CALCULATION "Preliminary score" based on weakest score in Staffing, Minutes, Access, Disciplines. This score is then reduced by 1 level if the school doesn't have at	FINAL SCORE CALCULATION 64 total points available for School Access.

least 3 of 5	Rinary e	elements
least 5 01 5	Dillal y 6	dements.

36 total points available for School Quality.

The table below shows the total point value available for each rubric element in each of the three school types (Elementary, High School, and Combination School):

	Available Points		
Rubric Elements	ES	HS	CS (K-12)
ACC	ESS		
Staffing	20	30	20
Minutes	24	-	15
Percent Access	20	-	10
Disciplines & Depth	-	34	19
QUA	LITY		
Standards Alignment	8	8	8
Governance	8	8	8
Budget	8	8	8
Partnerships	4	4	4
Professional Development	4	4	4
Parent/Community Engagement	2	2	2
Instructional Approach	2	2	2
Total Score	100	100	100

Final word

The Creative Schools Certification scoring system and its supporting data continue to lie at the core of Ingenuity's work of supporting equitable access to arts education. As both Ingenuity and CPS continue to collaborate and expand capacity to support arts education across Chicago, CSC 2.0 will help stakeholders better understand the needs of all schools, identify specific opportunities for improvement, and encourage all actors to invest in equitable access to arts

education throughout the District. The CSC 2.0 score schools receive will now, more than ever, trigger action and support for improvement.