

# PLC HANDBOOK

A PLC is educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve.

PLCs operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators.







## Vision

High levels of learning for all students.

## Mission

To create the highest quality public school that prepares all students for success in a globally competitive world.

## Values

- We are focused on learning.
- We sustain a collaborative culture with a focus on learning for all.
- We are focused on results.



## **OUR PLC JOURNEY**

2017

Teachers work mostly in isolation and the organizational structure is highly departmentalized

MCSS introduces PLC@Work. Teachers work in vertical teams to identify essential standards for core subjects. School is reorganized into interdisciplinary teams, daily academic opportunity time is added, as are full time academic & behavior interventionists.

2018

Revision of vision & mission statements to address 3 big ideas of PLCs. Teachers begin meeting weekly in collaborative teams and participate in Solution Tree PD. The 15 day challenge is used to introduce the teaching-assessing cycle. Teachers begin using AO to provide intervention and extension.

2019

The SEL team is formed from electives and specials endeavoring to guide our school's SEL instruction through action research. A core group of teachers participate in RTI Academy to continue to improve tiered supports. A tutorial schedule was implemented twice weekly to provide flexibility in sharing students for intervention and extension.

2020

Highly functioning collaborative teams emerge, and a dramatic cultural shift from working in isolation to thriving on collaboration is evident. and iInstruction is improving and teachers are learning from each other as a result of this process. Student learning increases across subgroups. SMS achieves Highly Effective Schools Accreditation from Solution Tree as a school committed to achieving and maintaining the highest levels of educational quality.

## The Three Big Ideas of PLCs

Becoming a PLC is a process, it is not a program to simply put in place. Three guiding principles, the three big ideas, steer the process. They are:



We accept learning as the fundamental purpose of school and therefore are willing to examine all practices in light of their impact on learning.



We are committed to working together to achieve our collective purpose. We cultivate a collaborative culture through the development of collaborative teams.



We assess our effectiveness on the basis of results rather than intentions. Individuals, teams, and schools seek relevant data and information to promote continuous improvement.

Source: All Things PLC (Solution Tree) http://www.allthingsplc.info

## 4 Critical Questions



### What do we want our students to learn?

Prioritized, must-learn standards and targets

## How will we know if they've learned it?

Teacher developed common formative assessments

## What will we do when they don't learn it?

Timely, directive, systematic interventions at all levels applicable (Tier 1, Tier, 2 & Tier 3)

## What will we do when they have learned it?

Timely enrichment and extension



#### **TIGHT**

The following aspects of the PLC at Work™ process are tight.

- Educators work in collaborative teams and take collective responsibility for student learning rather than working in isolation. As members of a team, they work interdependently to achieve common SMART goals for which members are mutually accountable.
- Collaborative teams implement a guaranteed and viable curriculum, unit by unit.
- Collaborative teams monitor student learning through an ongoing assessment process that includes frequent, team-developed common formative assessments.
- 4. Educators use the results of common assessments to:
  - · Improve individual practice
  - · Build the team's capacity to achieve its goals
  - Intervene or extend on behalf of individual students
- The school provides a systematic process for intervention and enrichment. Intervention is timely, directive (not invitational), and diagnostic (focusing on specific skills), and it does not remove a student from new direct instruction.

#### LOOSE

Aspects of the PLC at Work™ process that are loose empower teams of teachers to:

- Establish their own norms and SMART goals
- Determine the specific knowledge and skills students must acquire in each unit
- 3. Establish pacing for each unit (the length of time they will devote to the unit)
- 4. Determine the standard of proficiency each student must attain
- Gather evidence of student learning through an assessment process that includes one or more common formative assessments the team creates for each unit

PLCs are also loose when it comes to empowering individual teachers to:

- Use the instructional strategies that they feel work best for them
- 2. Use their own ongoing assessments as they teach
- Pace the content as they deem appropriate within the window of time the team has established for the unit





## Collaborative Team Work Cycle

<del></del>	students to learn? mine standard or learning t rstand standard or learning		-
☐ Develop CFA ☐ Set CFA Proficiency ☐ Set CFA Protocols: v ☐ Teach/check for unde ☐ Give CFA; organize da	erstanding/appropriately ad ta by student and learning What, So What, Now Wha	ljust/differentiate target	
☐ Reteach, individualized ☐ Reassess	pond when they don't learn e, small group, etc. (Tier I in chieved, student/teacher pr	ntervention)	ervention
	oond when they do learn it? o deeper and/or include "ni sed on standard		
Focus	Strategies	Assessment	Response
Using data, to team creates unit plan and common assessmen	d instructs using d effective strategies from	The team conducts common assessment, then meets to analyze data and discuss strategies	Teacher remediates or enriches based on the pre-determined proficiently level

## Required Monthly Documents



### **Essential Standards Chart**

Prioritized, must-learn standards for the year

### **Unit Plan**

Identifies essential standard to be taught, learning targets, and assessments

## **Data Analysis Protocol**

"Here's What, So What, Now What?" Student data listed by student, by target



#### **Collaborative Team Meeting**

Sample

#### **ACIP Objectives:**

Reach 55% proficiency in Reading and 53% proficiency in Math as measured by ACAP.

#### **Team Norms:**

- Specific agenda provided before the meeting
- Be prepared
- Be willing to collaborate & share responsibility
- Monitor your airtime
- Listen to understand, not just to respond
- Keep the conversation relevant to our content and students
- Focus on solutions

#### This Week's Agenda: (copied from last week's action items - edit as needed)

6th: Data Analysis: Here's what, so what, now what protocol for 1st essential standard

**7th**: Finish Part 2 Summative Assessment for January Data **8th**: Look at December data (Linear non-linear) Start Jan. CFA

#### Meeting Notes: (add after meeting - what did you accomplish?)

6th Completed the data analysis protocol for 1st essential standard

7th Start January Data Analysis

8th So what now what December Data

#### Action Items: (add after meeting - what needs to happen next?)

6th remediate and extend based on data analysis

**7th** Finish January Data Analysis, Look at Unit Plan

**8th** Create January CFA solving equations (one-two step)

What do we expect students to learn?					
GRADE: 7	SUBJECT: Science	SEMESTER: 1	Team Members:	sample	
Description of Standard	Example of Rigor	Prerequisite Skills	When Taught?	Common Summative Assessment	Extension Standards
What is the essential standard to be learned? Describe it in student-friendly terms.	What does proficient student work look like? Provide an example or description.	What prior knowledge, skills, or vocabulary are needed for a student to master this standard?	When will this standard be taught?	What assessments will be used to measure student mastery?	What will we do when students have already learned this standard?
5b I can explain photosynthesis and cellular respiration in the cycling of matter and the flow of energy through organisms.	Students can explain how the process of photosynthesis begins the flow of energy through organisms. Students can also explain how photosynthesis and cellular respiration work together.	The prior knowledge needed is a basic understanding of ecology from grade 5 science. Vocab: abiotic/biotic producers/consumers/de composers, ecosystem, cellular respiration, energy, energy transfer, molecules, photosynthesis, food web, energy pyramid	This unit can work during any part of the school year but will work well after students have been introduced to ecology. Cellular respiration provides an introduction to or segue from human body unit and /or cells unit.	Common formative and summative (TBD) assessments will be used to determine mastery.	Students create a graphic representation of the relationship between cellular respiration and photosynthesis
6 I can explain how resource availability impacts individual organisms and populations within an ecosystem.	Students can discuss resource availability and explain the effect this availability has on different populations in an ecosystem. Students can also determine the limiting factors that affect resource availability.	The prior knowledge needed is a basic understanding of ecology from grade 5 science.  Vocabulary: Analyze Interpret Evidence Resource(s) Organism(s) Ecosystem	This unit can work during any part of the school year but will work well during the first semester.	Common formative and summative (TBD) assessments will be used to determine mastery.	Student independent research on ecological issues in the world relating to resource availability followed with group presentations to share knowledge with the class.  Tragedy in the Making (A+)



## Science 7 Essential Standards Chart

		Biotic Abiotic Populations (e.g., sizes, reproduction rates, growth information) Competition			Field of Beans (A+)
10 I can use evidence to explain how behaviors and structures affect the probability of successful reproduction in plants and animals.	Students can make an evidence based claim (and give examples of animal behaviors that increase the chances for successful reproduction) about how an organism's/populations behavior affects its ability to reproduce and survive in its environment.	This unit works best after the characteristics of life, levels of organization, and ecology basics from 5th grade have already been covered.  Vocabulary Evidence Cause and Effect Scientific Reasoning Characteristics Behaviors Specialization Probability Reproduction Validity Reliability Relevance	This unit can be taught either at the beginning or at the end of the school year. It is best to be taught following characteristics of life / Levels of organization have already been covered.	A common formative assessment during the unit, as well as, a common summative assessment at the end of the unit.	Biome Project
18 I can explain, using evidence, that natural selection may lead to increasing or reducing certain traits	Students can use examples to construct an explanation of how natural selection affects the frequency/ occurrence of traits within a particular population.	This unit works best when students have prior knowledge of animal behaviors.  Vocabulary Explanation Evidence Evolution Extinct Extincton Natural selection Generation	This unit can be taught either at the beginning or at the end of the school year. It does need to be taught in conjunction or following standard 10.	A common formative assessment during the unti, as well as, and common summative assessment at the end of the unit.	A+ Bean Bunny Natural Selection Lab

## Essential Standards Unit Plan (copy file to edit)

Essential Standard: RI/RL. 7.1-Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.			<ul><li>☐ Knowledge</li><li>☐ Performance Skills</li><li>☐ Reasoning</li><li>☐ Product</li></ul>
End-of-Unit Assessment: Students have spent time analyzing the painting Jamestown Lifescape as well as completed an independent lesson on the qualities of an excellent topic sentence. Now, students will apply their knowledge gained in previous lessons and create an AEC paragraph about the theme of the painting using evidence and commentary to support their ideas.		When taught: August/September Instructional days needed: 17	
Knowledge Targets	Reasoning Targets	Performance Skills Targets	Product Targets
<ul> <li>Demonstrate basic writing mechanics.</li> <li>Organize a paragraph including textual references.</li> </ul>	<ul> <li>Analyze visual text for key details.</li> <li>Identify and include relevant evidence in paragraph.</li> <li>Provide commentary to explain evidence.</li> </ul>	Demonstrate     use of Standard     English     conventions in     writing     paragraph.	Craft a cohesive, well-organized, and mechanically correct paragraph that includes analysis and inferences drawn from the visual text.

#### **Student-friendly learning targets:**

- I can analyze a visual text, make inferences, and support those inferences with specific references to the text.
- I can analyze a non-fiction text
- I can determine or clarify the meaning of unknown and multiple meaning words.
- I can compose, edit, and revise a paragraph.
- I can cite textual evidence.



## Essential Standards Unit Plan (copy file to edit)

Assessment (Which target(s) are being assessed? How will the assessment be used? Is it individual or common?)	Connection to Standard (How will this assessment set up students for successful mastery of the standard?)	Student Involvement (How will the student engage in the assessment process?)
Dialectical Journals (formative)	Students practice comprehension and analysis of a text.	Students self-assess and revise their analysis skills based on assigned writing task.
2. No Red Ink (formative)	Students develop accurate use of mechanics and ability to self-edit.	Students self-assess and analyze results to identify growth targets.
3. AEC Paragraph (formative and summative)	Students combine all skills previously learned in a finished product.	Students peer-review and collaboratively evaluate sample paragraphs.

## CFA Guidelines

"Common formative assessments are team-designed, intentional measures used for the purpose of monitoring student attainment of essential learning targets throughout the instructional process. In addition to providing information about which students need additional support or extension, common formative assessments allow teams to examine the effects of their practice, and gain insight as to which instructional strategies yield high levels of learning. Furthermore, the data can be used to provide frequent feedback to students that they can use to adjust their own learning strategies."

- Common created collaboratively
- Each item aligned to specific target(s)
- Proficiency set in advance
  - Team determines desired score for overall proficiency AND
  - Sets proficiency for each target
- Data reported by student, by target
- Timing Team agrees to give assessment within the same 3-4 day window
- Analysis & Response
  - Specific Feedback
  - Reteach
  - Re-assess

#### A Common Formative Cycle

#### repeat

Then

#### 1... As a PLC

- Create a common formative that aligns with the selected PL(s)/PS(s)
- Decide on the guidelines for implementation:
  - o Same content?
  - Same day?
  - Completed by?
- Create a way of scoring/ norming the results of the formative task: use the language of the PS(s) when you do this
- · Predict how students will do

#### 2... on your own

- Implement with your students
- Score/norm the results
- Identify patterns regarding what they struggled with, did well on, and exceeded at
- Choose a high, medium, & low example

#### 3... As a PLC

- Discuss the results & share high/medium/low examples
  - Did some do better?
     Why? Did we instruct/ approach anything differently? If so, what can be learned from this?
- Address what needs to be adjusted moving forward
  - What do you do for those really struggling?
  - What do you do for those who've already mastered it?

## Here's What! So What? Now What? Data Protocol

#### **Today's Data**

Date	Standard(s)/Targets assessed
1/26/21	Properties of waves

**SMART Goal:** What was your team's goal for overall proficiency?

80% of all students will demonstrate mastery.  Did you meet the goal? yes
---------------------------------------------------------------------------

#### **HERE'S WHAT (Record observed patterns using factual statements.)**

Enter your overall results for each target. Add rows or columns as needed.

Teacher	Target 1: Properties of waves	Target 2:	Target 3:	TOTAL
Teacher A	80			
Teacher B	81			81

Where did students score the highest?

Types of waves		
31		

Where did students score the lowest?

Properties of waves,

What particular question(s) did many students answer incorrectly? Is there an observable pattern in the incorrect responses (e.g. choosing "a" instead of "c")?

specifically amplitude and crest.

They measure the whole wave rather than middle to top or middle to bottom.

Did a particular class/team do well in a certain area?

In person students did better.

Did a particular class/team score poorly in a particular area?

The ones who scored 8 or less were either not in the classroom or they did not do the work. The ones who engaged in the hands on activity did better.

#### **SO WHAT?** (Select priorities and generate hypotheses.)

Complete the chart for your greatest areas of need.

Criteria for priority selection

- 1. Is it within our scope of influence?
- 2. Is it doable?
- 3. Will it make a significant and enduring difference?

Priority/Problem (from "Here's What" statements)	Hypothesis (Why do we think this happened? What misconceptions might students have? Which instructional strategies were the most effective?)
Address the issue with measuring crest and amplitude.	They didn't understand how to and where to measure the wave. Virtual students missed hands-on instruction and didn't do as well. They didn't have prior knowledge on how to use the ruler and where to measure from.

#### NOW WHAT? (Form a plan of action including interventions and extensions.)

For each priority, list the specific actions you will take. For reteaching, list the **specific instructional strategies** you will use.

Problem/Priority	What are we going to do?	
Measurement	<ul> <li>Practice sheet with a ruler at the bottom that can be used digitally.         More examples provided.     </li> <li>Pull lessons from previous grades about how to measure.</li> </ul>	

l	

List specific students in need of intervention for each target (add columns as needed).

Target 1	Target 2	Target 3
Individual student names go here	Individual student names go here	Individual student names go here

How will we extend learning for those who have demonstrated mastery (include specific instructional strategies)?

- Research on what kinds of buildings survive earthquakes.
- What makes buildings more structurally sound (compare/contrast) How would you design the building?

	Should See and Hear Almost Daily	Will Sometimes See and Hear	Should Never See and Hear
From Teachers	<ul> <li>Clear learning targets with scales, rubrics, or models of quality work</li> <li>Clear rules and procedures</li> <li>Formative assessment of individuals and the whole class</li> <li>Using active engagement strategies</li> <li>Using content strategies that appear in all types of lessons</li> <li>Chunking content</li> <li>Noticing and reacting when students are not engaged</li> <li>Evidence of positive relationships with students</li> <li>Displaying objectivity and self-control</li> <li>Reinforcing rules and procedures fairly and consistently</li> <li>Demonstrating value and respect for reluctant learners</li> <li>Provide support and assistance to understand content and complete tasks</li> </ul>	<ul> <li>Celebrating student successes</li> <li>Academic games</li> <li>Direct instruction lessons         <ul> <li>Processing content</li> <li>Recording and representing content</li> </ul> </li> <li>Practicing and deepening lessons         <ul> <li>Structured practice</li> <li>Examining similarities and differences</li> <li>Examining errors in reasoning</li> </ul> </li> <li>Knowledge application lessons         <ul> <li>Cognitively complex tasks</li> <li>Providing resources and guidance</li> <li>Generating and defending claims</li> </ul> </li> <li>Differentiated instruction</li> <li>Opportunities to learn and talk about their own and others' backgrounds/cultures/differences</li> </ul>	<ul> <li>Sarcasm or personal criticism of students</li> <li>Low expectations of students</li> <li>Ignoring disengaged students</li> <li>Only the teacher talking about content or activity</li> </ul>
From Students	<ul> <li>Academic discussions with teacher and other students</li> <li>Demonstrate or express that learning experiences are positive</li> <li>Positive attitudes about the classroom and learning</li> <li>Actively engaged in learning activities</li> <li>Demonstrate understanding of the lesson</li> <li>Interacting respectfully with teacher and peers</li> <li>Transitions smoothly to activities</li> <li>Follows rules and procedures</li> </ul>	<ul> <li>Asking and responding to questions that involve higher order thinking</li> <li>Involved in cognitively complex tasks</li> <li>Take risks in learning without fear of negative feedback</li> <li>Make connections from content to real-life experiences</li> <li>Engaged in self-assessment or progress monitoring</li> <li>Responds to teacher feedback to improve understanding</li> <li>Revise or improve work based on feedback</li> <li>Collaborates with peers</li> <li>Uses digital tools for learning</li> </ul>	Choosing not to participate

The success of the PLC concept depends not on the merits of the concept itself, but on the most important element in the improvement of any school—the commitment and persistence of the educators within it.

RICHARD DUFOUR