

Virtual Looking at Student Work Protocol Sample Created by Claire Polcrack

LASW Planning & Notes Template 2019 - 2020

Always choose **PRIORITY lesson** from IPP and have standard note-taker for coach/teacher to share.

Vision of Meeting	Preparation for Meeting	
A strong LASW is the final element of a successful lesson cycle (IPP, observation feedback, LASW) that is the final check of the success of a lesson and to determine what re-teaches are necessary for scholar mastery. LASW meetings should be focused on the prioritized lessons of a unit and focusing on increasing teacher analysis and planning of re-teaches. The students selected for LASW should change slightly each quarter depending on the focus of the focus/EOY Goal.	Teacher: <ul style="list-style-type: none"> Completed IPP and be prepared to discuss lesson Graded ET and have copies available for LASW Meeting <ul style="list-style-type: none"> Provides copies of ETs for SWDs prior to meeting Creates new LASW document for meeting Co-teacher <ul style="list-style-type: none"> Reviewed data & ET samples ahead of meeting Review IPP from teacher for LASW lesson 	
Priority Areas	Indicators of Success	Most Common Pitfalls
<ul style="list-style-type: none"> Heavy Lifting – Teachers are doing the thinking/practicing/revising, not leader. Practice – Teacher should have time to plan re-teach on own & rehearse (if time allows). Encoding Learning – Teachers should be pushed to summarize key take-aways and transferability. 	<ul style="list-style-type: none"> Prepared Analysis – Coach has prepared own analysis ahead of meeting. Strong Use of Time – Teacher walks away motivated and feeling meeting was strong use of their time. Action Step Transfers – Practiced skill appears in all future LASW meetings. 	<ul style="list-style-type: none"> Timing - Spending too long on steps 1 & 2 (framing & analysis) Pre-work - Lack of clarity of pre-work and using that to lead more focused teacher analysis of gaps. Low Quality Work Time – Not ensuring clarity of misconception, KP, and stimulus prior to work time.

I) Unpacking Standard & Assessment Item (< 3 min)

Direction to Teacher: Complete at beginning of meeting with your co-teacher.

Framing what scholars need to know/do	
What do scholars need to know (content/vocabulary/ideas) to show mastery of the standard ? (<i>MUST address conceptual focus and goal of assessment.</i>) 1 min	KNOW: <ul style="list-style-type: none"> Students need to know the parts of a polynomial Students need to understand that solutions of a polynomial give a true statement Students need to know when an expression/equation describes a polynomial, line or exponential
What do scholars need to do (work/graphing/calculations) to show mastery of this question ? 1 min	SHOW: <ul style="list-style-type: none"> Students need to be able to classify polynomials by key features and parts. Students need to understand how to substitute properly and understand that keeping the parenthesis while substituting will help with proper steps. Students understand the standard forms of lines, exponents and polynomials.
What did we name as the CFS for exemplary work ? (<i>What should we be looking for when scoring the ETs?</i>) 1 min	CFS: <ol style="list-style-type: none">

II) ANALYZE FOCUS STUDENT WORK, NAMING ERRORS (< 5 min)

Direction to Teacher: Take 3-5 minutes to look through the scholar samples for each group, noting the trends you see.

Typical Perf.	Today's Perf.	Scholar Name	Observations of Work (name specific errors)
High	10/10	Sam. L.	<ul style="list-style-type: none"> organized, labeled, color coordinated substitution with parenthesis answer boxed and labeled as solution annotations correct use of power when substituted
High	8/10	Alv. G.	<ul style="list-style-type: none"> organized, labeled substitution with parenthesis answers boxed and labeled as solution/no solution no annotations correct use of power when substituted power is used as multiplication (power * base)
Medium	5/10	Alan L.	<ul style="list-style-type: none"> organized, labeled substitution with parenthesis in a but not in b answers boxed and labeled as solution/no solution no annotations

Medium	8/10	Durena G.	<ul style="list-style-type: none"> • correct use of power • organized, labeled • substitution with parenthesis but not properly • answer boxed and labeled as only one satisfies • annotations • correct power use • multiplying bases first before applying power • didn't include Leading coefficient (reading directions)
Medium	7/10	Jesus S.	<ul style="list-style-type: none"> • organized, labeled • lack of parenthesis when substituting
Low			
Low			

Full Vision of Excellence (2 points)	Partially Met (1 point)	Not Met (0 points)
___ students	___ students	___ students

(Pre-sort ahead of meeting into these 3 groups. Then do 2nd deep dive into "Partially Met" group. Identify conceptual misunderstanding for meeting.)

III) NAME ERRORS & MISCONCEPTIONS (< 5 min)

Naming Errors & Highest Leverage Conceptual Gap	
What errors do you notice? (Be as specific & precise as you can.) 3 min	<ul style="list-style-type: none"> - Multiplying the base and the power together, when evaluating $(2)^3 = 6$ instead of $2(2)(2)$ - Students who did not use parenthesis when evaluating had more errors when solving - All knew to substitute in. $-(-2)^2 = -4$ vs. $-(-2)^2 = 4$ <p>Misunderstandings Remaining:</p> <ul style="list-style-type: none"> • Exponent properties --- exponent FIRST then multiplying. $-a^2$ is the same as $-1(a)^2$ • Exponent = base times itself the number of times. Use this to evaluate
Which error is the highest leverage to address? Why? 1 min	Other errors will come up with solving future lessons (annotations, etc.). If students do not understand exponent rules, they will come up in every lesson and therefore we must understand.
Using the language of the standard, what is the conceptual misunderstanding that is causing the error? 1 min	The key student error is properly applying order of operations with exponents and the <u>two</u> biggest conceptual misunderstandings are: <ol style="list-style-type: none"> 1) Use of exponent to evaluate an polynomial expression 2) Simplifying exponential expressions of the form $-a^2$

IV) PLAN THE RE-TEACH (10-15 min)

Choose the Response to Error Option (< 1 min)			
Option	When to Use	Description	Outcomes
MODEL / THINK ALOUD (Should be rarely used)	<20% mastery. Almost no scholars have the correct answer.	Create a clear model with aligned CFS that show thinking behind each step by breaking down the process further.	<ul style="list-style-type: none"> • Key Points (How & What) • Scripted Model + CFUs (Model) OR
CHART THE ERROR	20-80% mastery. Some scholars are struggling to reach mastery.	Focusing scholars on the common error/exemplar analysis, naming KP & CFS then giving rest of period to practice, apply, and re-assess.	<ul style="list-style-type: none"> • Exemplar/Non-Exemplar (Chart the Error) OR • Close/Exemplar (Chart for Sophistication)
CHART FOR SOPHISTICATIO N	80-100% mastery. Most scholars have mastered the aim.	Use scholar work to compare a more efficient strategy/process/understanding or highlight more sophisticated vocabulary / annotations / analysis to push precision and deepen understanding.	<ul style="list-style-type: none"> • 3 BPQs for Discussion • Practice Problem(s) • Re-assessment ET • Re-Assessment date

Planning Template for Heavy Lifting Loop (5 min)

Shared document to complete planning (may co-plan or work independently depending on teacher skill).

CFS for Re-Teach Plan

1. Clear Exemplar and Non-Exemplar
2. Broad Question (Agree/Disagree?)
3. Funneled BPQs
4. Specific Prompt that stamps error

5. Specific Prompt that generalizes the key point

<p>Clarity of Misconception</p> <ul style="list-style-type: none"> What is the precise misunderstanding? (In scholar-friendly language) Ensure practice hones in on that misconception. 	<p>The key student error is properly applying order of operations with exponents and the <u>two</u> biggest conceptual misunderstandings are:</p> <ol style="list-style-type: none"> Use of exponent to evaluate an polynomial expression Simplifying exponential expressions of the form $-a^2$
<p>Key Point</p> <ul style="list-style-type: none"> What key point should students understand and do as a result of the re-teach that clarifies the misunderstanding and/or error? Ensure addressed both conceptual/procedural misunderstandings 	<p>A student is attempting to evaluate $f(x) = -x^2 - 6x - 7$, when $x = -2$. Which of the following are equivalent? Select all that apply.</p> <ol style="list-style-type: none"> $-(-2)^2 - 6(-2) - 7$ $-1(-2)(-2) - 6(-2) - 7$ $2^2 + 12 - 7$ $-4 + 12 - 7$ 1 9 <p>Students Should Identify:</p> <ul style="list-style-type: none"> i & iv & v - How to rewrite and evaluate polynomial of $-a^2$ form. ii & iii - What does an exponent mean and what order do I apply
<p>Stimulus</p> <ul style="list-style-type: none"> What error analysis, problem, CFS or other representation will be used to elicit the key point? 	<p>When evaluating polynomials, I have to evaluate the exponent ($a^2 = a(a)$) before applying any multiplication of the coefficient ($-a^2 = -1(a)(a)$).</p> <p>---> make sure to include parenthesis when evaluating to ensure accurate simplification</p> <p>The power of the exponent tells me how many times I multiply the base.</p> <ul style="list-style-type: none"> BPQ: $-x^3$ for $x = -3$, what would the answer be and why?
<p>Discussion Prompts</p> <ul style="list-style-type: none"> What questions are you going to ask students to engage in the stimulus, name the misconception, and land the key point? Include any BPQs needed. 	<p>Students complete this problem as the do now.</p> <ul style="list-style-type: none"> Thumbs up/down. Show-call student work that chose each answer & have them explain why. Revote & move-on. <p>Anticipated Misconceptions - ii or iii → Students mixing up order of operations.</p> <ul style="list-style-type: none"> BPQ: If i is correct, how would we rewrite this to choose the right answer for ii or iii? (We need to square the base of -2. The coefficient stays negative in front.) BPQ: Why is ii correct? (Because the power does NOT apply to the coefficient of -1 in front of the parenthesis. Only $x = -2$ is the base of the exponent.)
<p>Stamp Key Point</p> <ul style="list-style-type: none"> Use 100% move to ensure ALL scholars understand the key point. 	

Bonus: If time allows, rehearse the **trickiest part** of the re-teach.

V) STAMP ACTION STEPS (<2 min)

Ensure Re-Teach Happens & Close the Loop

<p>Did we complete all outcomes required for the re-teach?</p>	<ul style="list-style-type: none"> ● Key Points (How & What) ● Scripted Model + CFUs (Model) OR Exemplar/Non-Exemplar (Chart the Error) OR Close/Exemplar (Chart for Sophistication) ● 3 BPQs for Discussion ● Re-Assessment ET ● Re-Assessment date
<p>What additional materials do you need to create/gather?</p>	
<p>When will this re-teach happen (check your Curriculum Map)? What is our goal?</p>	<p>Monday, February 24th during Math Intervention</p>
<p>Did you share this document with Walker and your coach?</p>	