Teachers' Metacognition

The following table is adapted from "Promoting Student Metacognition." It contains a series of self-reflective questions designed to promote educator growth. Think about a current lesson or series of lessons that you either plan to teach, are currently teaching, or have taught. Apply the appropriate set of questions to the lesson(s) on which you have chosen to reflect. Feel free to add questions.

Planning	Monitoring	Evaluating	
What are my goals for this class session? How did I arrive at these goals?	What do I notice about how students are behaving during this class session? Why do I think this is happening?	How do I think today's class session went? Why do I think that? What evidence do I have?	
What do I think students already know about this topic? What evidence do I have for my thinking?	What language or active-learning strategies am I using that appear to be facilitating learning? Impeding learning?	How did the ideas of today's class session relate to previous class sessions? To what extent do I think students saw those connections?	
How can I make this material personally relevant for my students? Why do I think this?	How is the pace of the class going? What could I do right now to improve the class session?	How will what I think about the quality of today's class session, influence my preparations for next time?	
What mistakes did I make last time I taught this material, and what do I need to do so that I do not repeat these mistakes?	In what ways am I effectively reaching my goals for students through my teaching? What is my evidence? How can I expand on these successful strategies?	What evidence do I have that students in my course learned what I think they learned?	
What do I want students to be able to do by the end of this course? What do I want them to still be able to do five years later?	In what ways is my approach to teaching in this course not helping students learn? What is my evidence? How can I change my approach?	How is my thinking about teaching changing?	



Transforming Teaching, Leading, and Learning Through Collaborative Inquiry Teams

(Writing in red refers to teacher actions that guide students through a formative learning process)

WHERE ARE WE GOING?

- What is the goal for learning? On which skills, concepts, and content will students be working towards mastery (standards aligned)?
- What evidence will we collect that aligns with the goals?
- What learning experiences and differentiated research based strategies will we implement?
- How will we ensure that students understand the learning goals and criteria?
- How will students be responsible for their own learning (voice and choice)?
- How will students be involved with peer-to-peer teaching and feedback?

HOW ARE WE DOING?

- What are we observing about student learning in the evidence we evaluated?
- Why are we getting these results? What learning experiences and instructional strategies did we use?
- How will we determine the learning needs of each student? Will we group students?
- What can we do differently to reteach learners who need extra support?
- How can we work together to support struggling learners?
- How will we involve students in receiving feedback, in planning their next steps, and revising their work?

WHAT ARE OUR NEXT STEPS?

- Which appropriate, researchbased instructional practices are we implementing?
- How will we continuously monitor the impact of these practices?
- How will we involve students in reflecting on their learning, setting their own learning goals, taking specific action steps that they establish, and monitoring their own progress?
- How will we involve students in peer-to-peer teaching and feedback?
- How will we provide and receive feedback from our students?

1.Determine Goal(s), **Evidence**, Action(s)

2. Analyze Results

3. Engage / Reengage

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Collaborative Inquiry Team Meeting Variations

Please add to the following list of Collaborative Team meeting purposes and structures. Please note that in each of these meetings, evidence of student learning is analyzed to provide information for teachers about the impact of their instruction.

- 1. Formal meetings examining unit pre- and post- formative assessment results (Data is charted and samples of student work are analyzed. Next steps for instructional improvment are determined and evidence for monitoring the strategy's impact is selected.)
- 2. Interim assessment grade level meetings focusing on specific standards and products (Data may be charted and samples of student work are analyzed. Next steps for instructional improvment are determined and evidence for monitoring the strategy's impact is selected.)
- 3. Informal grade or course alike meetings isolating a limited number of standards, perhaps one, and also a limited number instructional practices, perhaps one (Samples of student work are analyzed. Next steps for instructional improvment are determined and evidence for monitoring the strategy's impact is selected.)
- 4. Action research meetings examing the implementation and results of a specific instructional practice (Data is collected specific to the research question and design. The conclusions of the research may be used to impact future practices.)
- Grade span or department-wide meetings forcused on the impact of a selected instructional practice applied across multiple grade levels (Evidence of student learning is charted but may differ by grade levels. However, the same instructional practice is being assessed. Conclusions about the impact of the strategy on student learning are drawn and decisions about continuing, revising, or replacing the strategey are reached.)
- 6. Lesson study analyzing the impact of instructional practices on student learning (Teachers observe a colleague guiding a lesson that all teachers will eventually teach. Teachers dialogue about students' reponses to the lesson to detemine how the lesson can be inproved for the next time it is taught.)



Dialogues Between Administrators and Teachers About Instruction, Assessment, and Continuous Learning

The following questions are designed to stimulate dialogue between educators as they collectively reflect on how student-learning results inform improved teaching and leadership practices. Don't try to answer all of the questions at once. Select two or three on which you will focus deeply.

- 1. On which learning goals (standards and objectives) are students currently concentrating? What concepts, skills, and content are students working to master?
- 2. How do the lessons/units of study address the learning goals (standards and objectives)? Are the lessons/units of study engaging for students? Are they authentic, student-centered, and problem/solution oriented?
- 3. What cognitive rigor (Bloom's Taxonomy) and depth of complexity (Webb's Depth of Knowledge) are students expected to meet? What do those expectations look like specifically in terms of student performance?
- 4. To what extent are students meeting the desired learning expectations? What evidence of student learning is being used to determine if students are mastering these skills and concepts in the standards/learning goals? How is this evidence being used to inform instructional decisions?
- 5. How are the components of formative learning being implemented in daily work with students?
 - a. How are students involved in generating the success criteria?
 - b. How are students provided opportunities to engage with one another in peer-to-peer feedback? What guidelines and documents are used to support peer feedback?
 - c. How and when do teachers supply feedback to students? How do students use this feedback to revise their work?
 - d. How is evidence of student learning used to differentiate instruction? How are students engaged in teaching one another?
 - e. How are students involved in meta-cognitive reflection?
 - f. How are students shaping and sharing their learning goals, and what do their plans-of-action involve?
 - g. How are students provided with multiple opportunities for success?
- 6. What are the possible cause/effect relationships between instructional practices and students' assessment results (evidence of student learning)?
- 7. What are educators learning about their practices and what adjustments are being made to improve practices? Which new strategies may require additional professional learning?
- 8. How are literacy strategies being infused into the curriculum? What impact are these strategies making on student learning?
- 9. What can administrators do to better support teachers' efforts with students as all educators work together to improve learning?

Effective Collaborative Inquiry Teams Communicate at Level 4.0

Behaviors, Structure of Attention	Listening	Conversing	Organizing	Learning/Learner
1.0 Habitual awareness	Downloading habits of thought, projecting old judgments	Downloading habits of thought from conforming	Centralized control – Organizing around hierarchy	Hierarchy – commanding, directing Learner: Passive recipient
2.0 Ego System Awareness	Factual, open-minded, aware of the world around us	Debate – Speaking from differentiating	Divisionalized – Subdividing an organization into a number of divisions	Competing Learner: Memorize Input
3.0 Stakeholder awareness	Empathetic, open- hearted, seeing ourselves through the eyes of others	Dialogue – Speaking from inquiring others, self	Distributed/networked – Organizing around groups' interests and expertise	Dialogue, cooperating Learner: Explore new areas and questions
4.0 Ecosystem awareness	Generative – Originating, open, listening from new possibilities, deep self- reflection	Collective creativity – Open awareness, speaking from deep perceptions and new insights	Creative – Organizing around insights that emerge from dialogue and open thought	Awareness-based collective action, co- creating Learner: Co-sense and shape the future



Leading Schools From The Emerging Future:



Implementing Awareness-Based Change for Collaborative Teams

Otto Scharmer, Theory U

There are two different sources of learning. One is the present moment that extends the past and is shaped by what has been. The second is a quality of the present moment that functions as a gateway to a field of future possibilities. It is this second stream of time that matters most. Without that connection we tend to end up as victims of disruption rather than co-shapers of a productive future.

Otto Scharmer

We are engaging in a simulation to experience the core process of applying Theory U to POUSD's areas where there are conflicts or concerns. For this activity, please focus on your PLCs. Determine a specific focus where there is conflict or concern. Next, determine the key players who are connected to the area and who are vested in the conflict or concern (e.g., principals, assessment directors, teaching and learning directors, teachers, parents, students, etc.). Figuratively, bring them to the table and open discussion from multiple perspectives. Describe each of the following components as it might be played out in real time.

1. What conflict or concern are you observing in your PLCs? Please clearly explain the conflict or concern you identified. What is your ultimate purpose?

- 2. **Downloading** is reconfirming what one already knows. When downloading occurs, the discussion is frozen by old mental habits and past experiences. People respond only through their own narrow point of view without considering another's perspective. What does *downloading* look like concerning the conflict or concern in your area of focus?
- 3. Seeing is suspending our habitual judgments, and noticing what is new viewing with fresh eyes. What would *seeing* look like from the perspectives of the key players involved in the conflict or concern?
- 4. **Sensing r**edirects attention so that perceptions widen and deepen. This shift leads to self-reflection so that the boundaries between key players in the conflict or concern open up. How would *sensing* impact the key players' perceptions and reactions to the conflict or concern?
- 5. **Presencing** allows participants to let go of past practices and connect to future potential. The boundaries between key players collapses in order to provide a space for future-focused solutions/paths to emerge. What could this *presencing* transition look like when applied to the conflict or concern?
- 6. **Crystallizing** occurs as the perspectives between key players begin to invert. At this point, envisioning from the field of future solutions/paths emerges. Egocentric perspectives are being replaced by a greater awareness of ecosystem opportunities. What might *crystallizing* look like and feel like as you focus on the conflict or concern?
- 7. **Prototyping** leads to action. The relationship between key players continues its inversion, blending their perspectives into a future-informed action. During this point in the process, prototypes are co-created, implemented, and evaluated through feedback and dialogue. Prototyping leads to **performing** and making a collective impact. What *prototype* can you suggest that addresses the conflict or concern? Please note the following seven questions as you develop your prototype?

As your group generates an idea for prototyping, ask the following seven questions:
1. Is it relevant for the involved stakeholders, organization, and community?
2. Is it new and transformative to the system?
3. Is it rapid? Can you test it with enough time to get feedback and adapt (avoid analysis paralysis)?
4. Can you do it on a small scale that allows for meaningful experimentation?
5. Does this prototype allow you to spotlight the most critical variables?
6. Does it leverage the strengths, competencies, and resources in existing communities and networks?
7. Is it replicable? Can it grow to scale?