Protocols for Examining Student Work

*Atlas Protocol
This protocol looks at the student work in greater depth than the others. It is effective once the team has gotten its "feet wet" with the basic and tuning protocols.

*Collaborative Assessment Conference Protocol
This protocol provides a structure by which teachers come together to review student work. First determine what it reveals about the student and the issues she/he cares about and then to consider how the student's issues and concerns relate to the teacher's goals for the student. The last part of the conversation — the discussion of classroom practice — grows out of these initial considerations.

*Examining Student Work Protocol
This protocol allows for students to review and assess their own work. Once teachers are familiar with the use of protocols for reviewing student work, this protocol can be used in the classroom.

*Rounds Protocol
This protocol allows for participant discussion, which consists of three rounds. Round one, participants describe what they have seen in the student work. The second round, participants reach some conclusions or generalizations about what they have reviewed. The third round, participants create a set of recommendations on what they have concluded and generalized from the second round.

*Tuning Protocol
The objective of this protocol is to determine which activities will get our students to meet specific goals. This protocol helps the learning team assess and analyze whether their lessons are aligned with the goals, based on students work.

*Vertical Slice Protocol
This protocol focuses on an examination of all the student work produced during a narrow time period by a sample of students in a particular school or district.

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ATLAS - Learning From Student Work

Learning from Student Work is a tool to guide groups of teachers discovering what students understand and how they are thinking. The tool, developed by Eric Buchovecky, is based in part on the work of the Leadership for Urban Mathematics Project and of the Assessment Communities of Teachers Project. The tool also draws on the work of Steve Seidel and Evangeline Harris-Stefanakis of Project Zero at Harvard University. Revised November 2000 by Gene Thompson-Grove for NSRF.

Selecting Student Work to Share

Student work is the centerpiece of the group discussion. The following guidelines can help in selecting student work that will promote the most interesting and productive group discussions.

Choose assignments that involve lots of thinking and that give students some freedom in how they approach the task. Avoid work that consists primarily of answers with little explanation or that involves the application of well-defined procedure. At times it may be useful to share several pieces of student work that show different approaches to the same assignment.

Ambiguous or puzzling work tends to stimulate the best discussions. Since it does not readily match expectations, it encourages close attention to details and affords multiple interpretations. If this feels uncomfortable, it may be useful to start by examining anonymous samples of student work collected from within the group or gathered from other sources.

Another approach for selecting student work is for the group to plan a classroom activity jointly, teach it independently, then bring the student work back to the group for discussion. This approach is a good way to begin examining teaching or assessment practices based on what the group has learned from looking at student work.

Sharing and Discussion of Student Work

Discussions of student work sometimes make people feel "on the spot" or exposed, either for themselves or for their students. The use of a structured dialogue format provides an effective technique for managing the discussion and maintaining its focus.

A structured dialogue format is a way of organizing a group conversation by clearly defining who should be talking when and about what. While at first it may seem rigid and artificial, a clearly defined structure frees the group to focus its attention on what is most important. In general, structured dialogue formats allot specified times for the group to discuss various aspects of the work.

Consider the student whose work is being examined to be a silent member of the group. Assume, as for any member, that the student is acting in good faith and has put forth his or her best effort.

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Reflecting on the Process

Looking for evidence of student thinking ...

- What did you see in this student's work that was interesting or surprising?
- What did you learn about how this student thinks and learns?
- What about the process helped you to see and learn these things?

Listening to colleagues thinking ...

- What did you learn from listening to your colleagues that was interesting or surprising?
- What new perspectives did your colleagues provide?
- How can you make use of your colleagues' perspectives?

Reflecting on one's own thinking ...

- What questions about teaching and assessment did looking at the students' work raise for you?
- How can you pursue these questions further?
- Are there things you would like to try in your classroom as a result of looking at this student's work?

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ATLAS - Learning From Student Work Protocol

1. Getting Started

- The facilitator reminds the group of the norms: no fault, collaboration, and consensus and, with the group, establishes time limits for each part of the process.
  Note: Each of the next four steps should be about 10 minutes in length. The presenter is silent until the "Reflecting on the Process," step 5. The group should avoid talking to the presenter during steps 2-4. It is sometimes helpful for the presenter to pull away from the table and take notes.
- The educator providing the student work gives a very brief statement of the assignment. The educator should describe only what the student was asked to do and avoid explaining what he or she hoped or expected to see.
- The educator providing the work should not give any background information about the student or the student's work. In particular, the educator should avoid any statements about whether this is a strong or weak student or whether this is a particularly good or poor piece of work from this student.

  Note: After the group becomes more familiar with this process for looking at student work, you may find it useful to hear the educator's expectations. However, this information will focus more of the group's attention on the design of the assignment, the instruction, and the assessment, rather than on seeing what is actually present in the student's work.

2. Describing the Student Work

- The facilitator asks: "What do you see?"
- During this period the group gathers as much information as possible from the student work.
- Group members describe what they see in the student's work, avoiding judgments about quality or interpretations about what the student was doing.
- If judgments or interpretations do arise, the facilitator should ask the person to describe the evidence on which they are based.
- It may be useful to list the group's observations on chart paper. If interpretations come up, they can be listed in another column for later discussion during Step 3.

3. Interpreting the Student Work

- The facilitator asks: "From the student's perspective, what is the student working on?"
- During this period, the group tries to make sense of what the student was doing and why. The group should try to find as many different interpretations as possible and evaluate them against the kind and quality of evidence.
- From the evidence gathered in the preceding section, try to infer: what the student was thinking and why; what the student does and does not understand; what the student was most interested in; how the student interpreted the assignment.
- Think broadly and creatively. Assume that the work, no matter how confusing, makes sense to the student; your job is to see what the student sees.
- As you listen to each other's interpretations, ask questions that help you better understand each other's perspectives.

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4. Implications for Classroom Practice

- The facilitator asks: "What are the implications of this work for teaching and assessment?"
- Based on the group's observations and interpretations, discuss any implications this work might have for teaching and assessment in the classroom. In particular, consider the following questions:
  - —What steps could the teacher take next with this student?
  - —What teaching strategies might be most effective?
  - —What else would you like to see in the student work? What kinds of assignments or assessments could provide this information?
  - —What does this conversation make you think about in terms of your own practice? About teaching and learning in general?

5. Reflecting on the ATLAS

- The presenter shares back what they learned about the student, the work, and what they're now thinking. The discussion then opens to the larger group to discuss what was learned about the student, about colleagues, and self.

6. Debriefing the Process

- How well did the process work-what went well, and what could be improved? If the group has designated someone to observe the conversation, this person should report his or her observations.

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Collaborative Assessment Conference: Overview

Excerpted, with slight adaptations, from Looking Together at Student Work *by Tina Blythe, David Allen, and Barbara S. Powell (New York: Teachers College Press, 1999).*

A piece of student work has the potential to reveal not only the student's mastery of the curriculum's goals, but also a wealth of information about the student: her/his intellectual interests, strengths, and struggles. The Collaborative Assessment Conference was designed to give teachers a systematic way to mine this richness. It provides a structure by which teachers come together to look at a piece of work, first to determine what it reveals about the student and the issues she/he cares about, and then to consider how the student's issues and concerns relate to the teacher's goals for the student. The last part of the conversation — the discussion of classroom practice — grows out of these initial considerations.

The structure for the conference evolved from 3 key ideas:

- First, students use school assignments, especially open-ended ones, to tackle important problems in which they are personally interested. Sometimes these problems are the same ones that the teacher has assigned them to work on, sometimes not.
- Second, we can only begin to see and understand the serious work that students undertake if we suspend judgment long enough to look carefully and closely at what is actually in the work rather than what we hope to see in it.
- Third, we need the perspective of others — especially those who are not intimate with our goals for our students — to help us to see aspects of the student and the work that would otherwise escape us. We need others to help us generate ideas about how to use this information to shape our daily practice.

Since 1988, when Steve Seidel and his colleagues at Project Zero developed this process, the Collaborative Assessment Conference has been used in a variety of ways: to give teachers the opportunity to hone their ability to look closely at and interpret students' work; to explore the strengths and needs of a particular child; to reflect on the work collected in student portfolios; and to foster conversations among faculty about the kind of work students are doing and how faculty can best support that work.

In the Collaborative Assessment Conference, the presenting teacher brings a piece of student work to share with a group of 5-10 colleagues (usually other teachers and administrators). The process begins with the presenting teacher showing (or distributing copies of) the piece to the group. Throughout the first part of the conference, the presenting teacher says nothing, giving no information about the student, the assignment, or the context in which the student worked.

Through a series of questions asked by the facilitator, the group works to understand the piece by describing it in detail and looking for clues that would suggest the problems, issues, or aspects of the work with which the student was most engaged. They do this without judgments about the quality of work or how it suits their personal tastes. The facilitator helps this process by asking participants to point out the evidence on which they based the judgments that inevitably slip out. For example, if someone comments that the work seems very creative, the facilitator might ask him or her to describe the aspect of the work that led him or her to say that.

In the second part of the conference, the focus broadens. Having concentrated intensively on the piece itself, the group, in conversation with the presenting teacher, now considers the conditions under which the work was created as well as broader issues of teaching and learning. First, the presenting teacher provides any information that she/he thinks is relevant about the context of the work. This might include describing the assignment, responding to the discussion, answering questions (though she/he does not have to respond to all the questions raised in the first part of the conference), describing other work by the child, and/or commenting on how her/his own reading or observation of the work compares to that of the group.

Next, the facilitator asks the whole group (presenting teacher included) to reflect on the ideas generated by the discussion of the piece. These might be reflections about specific next steps for the child in question, ideas about what the participants might do in their own classes, or thoughts about the teaching and learning process in general. Finally, the whole group reflects on the conference itself.

The following steps are a working agenda for a Collaborative Assessment Conference. The time allotted for each step of the conference is not fixed, since the time needed for each step will vary in accordance with the work being considered. At each stage, the facilitator should use his or her judgment in deciding when to move the group on to the next step.

Collaborative Assessment Conference Protocol

Developed by Steve Seidel and colleagues at Harvard Project Zero.

1. **Getting Started**
   - The group chooses a facilitator who will make sure the group stays focused on the particular issue addressed in each step.
   - The presenting teacher puts the selected work in a place where everyone can see it or provides copies for the other participants. She/he says nothing about the work, the context in which it was created, or the student, until Step 5.
   - The participants observe or read the work in silence, perhaps making brief notes about aspects of it that they particularly notice.

2. **Describing the Work**
   - The facilitator asks the group: "What do you see?"
   - Group members provide answers without making judgments about the quality of the work or their personal preferences.
   - If a judgment emerges, the facilitator asks for the evidence on which the judgment is based.

3. **Asking Questions About the Work**
   - The facilitator asks the group: "What questions does this work raise for you?"
   - Group members state any questions they have about the work, the child, the assignment, the circumstances under which the work was carried out, and so on.
   - The presenting teacher may choose to make notes about these questions, but she/he is does not respond to them now — nor is she/he obligated to respond to them in Step 5 during the time when the presenting teacher speaks.

4. **Speculating About What the Student is Working On**
   - The facilitator asks the group, "What do you think the child is working on?"
   - Participants, based on their reading or observation of the work, make suggestions about the problems or issues that the student might have been focused on in carrying out the assignment.

5. **Hearing from the Presenting Teacher**
   - The facilitator invites the presenting teacher to speak.
   - The presenting teacher provides his or her perspective on the student's work, describing what she/he sees in it, responding (if she/he chooses) to one or more of the questions raised, and adding any other information that she/he feels is important to share with the group.
   - The presenting teacher also comments on anything surprising or unexpected that she/he heard during the describing, questioning, and speculating phases.

Protocols are most powerful and effective when used within an ongoing professional learning community and facilitated by a skilled facilitator. To learn more about professional learning communities and seminars for facilitation, please visit the School Reform Initiative website at www.schoolreforminitiative.org.

6. **Discussing Implications for Teaching and Learning**
The facilitator invites everyone (the participants and the presenting teacher) to share any thoughts they have about their own teaching, children's learning, or ways to support this particular child in future instruction.

7. **Reflecting on the Collaborative Assessment Conference**
The group reflects on the experiences of the conference as a whole or particular parts of it.

8. **Thanks to the Presenting Teacher**

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Examining Student Work
a Constructivist Protocol

Developed by Daniel Baron.

What makes students and teachers really care about their work? This self-assessment tool is aimed at generating new insights and increasing that investment. The protocol can be used both for assessment and for planning, and it can be done individually or in groups.

1. Students bring to class an example of the best work they have ever done. The work can come from any source, medium, or setting.
2. Students look carefully at their own work and come up with a list of three to five qualities they believe exist in the work and contribute to making it their best.
3. The whole class brainstorms the qualities they found, then condenses the list to three to five qualities everyone agrees are essential to good work.
4. The teacher gives an assignment to the class, asking that students attempt to build those qualities into their work. Students should make five copies of their completed assignment.
5. When the assignment is completed, small groups of three or four students look at each other's work in search of evidence that the agreed-on qualities are present. (The tuning protocol makes an excellent vehicle for the student to present such evidence.)

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Rounds Protocol

Source: This protocol is a variation on The Descriptive Review of a Child by Pat Carini at the Prospect Center in Bennington, Vermont, for reflecting on students and their work, as described by Kelly (1996). This protocol is also based on ideas from Marilyn Wentworth and others at The Fulton Academy of Geographic and Life Sciences and Fort Pitt Elementary School in Pittsburgh, Pennsylvania; Vanessa Turpin, Trish Rygalski, and Jerome Morris of the Summer 1997 CFG Coaches Training Workshop; Steve Hoffman of the Alternative Community School in Ithaca, New York; and Steve Strull of DuSable High School in Chicago.

Overview: This protocol is very similar to the Tuning Protocol, except for the participant discussion, which consists of three rounds. During the first round, participants simply describe what they've seen in the student work examined. During the second round, participants reach some conclusions or generalizations about what they have described. During the third and final round, participants base a set of recommendations (both cool and warm in nature) on what they have concluded and generalized from the second round. Note that the descriptions in the first round of discussion should be objective. It is often hard for educators to describe rather than evaluate a work.

Other Uses: This protocol can also be used to understand a student through his or her work; in fact, this was the purpose of the Descriptive Review of a Child, on which this protocol is based.

Number of Participants: 8–10 participants, a presenter, and a facilitator. This protocol can also be done with multiple concurrent groups, each with its own presenter and facilitator, or with one presenter and multiple concurrent groups.

Time Required: Typically 45 minutes to 1 hour

Steps (suggested times based on a 60-minute session):

Step 1: Introduction (first time only, 5 minutes)

- If participants don't usually work together, they briefly introduce themselves.
- Facilitator briefly introduces information about and guidelines for protocols, and establishes time limits for steps.
- Participants explore the assumptions that are important to making protocols work (see p. 13).

Step 2: Presentation (10 minutes)

- Presenter sets the context, describing the teaching/learning situation, while participants remain quiet and take notes.
- Presenter shares materials related to the teaching/learning situation described, including student work. When student work is being presented, presenter should allow participants time to examine the work.
- Presenter poses one or two key questions about the teaching/learning situation.

Step 3: Clarifying Questions (5 minutes)

- Participants ask nonevaluative questions about the presentation (e.g., "What happened before X? What did you do next? What did Y say?").
- Facilitator guards against questions that approach evaluation (e.g., "Why didn't you try X?"). Participants who ask evaluative questions may be invited to rephrase the questions as clarifying, or to save the questions for the participant discussion step.
- It is entirely possible that the group will not get all its questions answered—there is never enough time!—but participants should have enough information at this stage for the protocol to be productive.

Step 4: Individual Writing (5 minutes). Both the presenter and the participants write about the presentation, addressing the key question(s). This step helps each participant focus and have something to say during the participant discussion.

Step 5: Participant Discussion (15 minutes). The participants move through the following rounds. If possible, a recorder writes what participants say on chart paper. The presenter remains silent and takes notes throughout.

- *Round 1: Description (5 minutes).* In round-robin style, participants describe what they do (or do not) see in the work (e.g., "The student indents for new paragraphs"). Participants can pass if they have nothing to add.
- *Round 2: Generalization (5 minutes).* In round-robin style, participants make generalizations about what they do (or do not) see in the work, based on the descriptions from the first round (e.g., "The student uses indention erratically"). Participants can pass if they have nothing to add.
- *Round 3: Recommendations (5 minutes).* In round-robin style, participants make recommendations based on the descriptions and generalizations from the previous two rounds (e.g., "The student needs to learn the rules for forming paragraphs"). Participants can pass if they have nothing to add. The group should make every effort to offer warm and cool recommendations; warm recommendations indicate what works and should be continued, and cool recommendations indicate what needs improvement. The group should also make every effort to address the presenter's key questions about the work.

Step 6: Presenter Reflection (15 minutes)

- The presenter reflects aloud on the participants' discussion, using the issues the participants raised to deepen understanding and reflecting on possible answers to questions posed. The presenter can also suggest future actions, questions, dilemmas, and so forth, and may correct any misunderstandings.
- Participants silently take notes on the presenter reflection.

Step 7: Debriefing (5 minutes)

- The presenter discusses how well the protocol worked and thanks the participants for their work.
- Participants discuss how well they think the protocol worked and thank the presenter for bringing the work to them to be tuned.
- The presenter and participants engage in more general discussion of both the situation examined and the protocol process itself.
- The facilitator engages participants in discussion of the three rounds and why they are important.

Critical Elements:

- A balance of warm and cool feedback (unless the presenter has declared a need for more of one than the other)
- Attention to the presenter's key questions
- Thoughtful, provocative, and substantive discourse

During the participant discussion, the facilitator may also help the participants to stick to nonevaluative descriptions in the first round, and base both generalizations and recommendations on these descriptions. If participants make generalizations or recommendations that are not based on previously made descriptions, the facilitator should encourage them to come up with relevant descriptions.

Tips for the Facilitator: One of the best activities the facilitator can engage participants in before starting this protocol is practice with description. For example, the facilitator could start by asking participants to describe the room they are in. If a participant says, "It's crowded," the facilitator could gently point out that this is a generalization. Participants should simply describe the size of the room, its furnishings, the number of people in it, and so forth before concluding that it's crowded. Similarly, if participants say that the room is cold, they should first establish the temperature; if they volunteer that the room is noisy, they should first describe all the noises in the room. As further practice, they might then try describing a piece of student work that is not being used for the protocol.

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The Tuning Protocol:
Tuning a Plan

Developed in the field by educators affiliated with NSRF.

When you tune a plan you have two basic components: a set of goals and a set of activities sequenced in a way that you believe will help the people you work with to meet those goals. The general objective is to get feedback from your colleagues about the degree to which the activities you structure seem likely to get your group to these goals. The plan is "in tune" when the goals and activities are most in alignment.

Time: Approximately 1 hour
Roles: Presenter, Participants (seated in small groups of 4-5), Small Group Facilitator (who also participates), and Large Group Facilitator

1. Presentation to the Large Group (10 minutes)
- Context for plan
- Goals that drive the plan
- Focusing question for feedback
  NOTE: This question should be a more specific version of the general objective above.
  Participants are silent.

2. Clarifying Questions from the Large Group (5 minutes)
- Clarifying questions are matters of fact. Save substantive issues for later.
  The facilitator is responsible for making sure that clarifying questions are really clarifying.

3. Examination of the Plan (7 minutes)
- Participants read the plan, taking notes on where the plan seems "in tune" with the stated goals and where there might be problems.

4. Pause to Reflect on Feedback (2-3 minutes)

5. Feedback in Small Groups (15-20 minutes)
- Participants talk to each other about the presenter's plan (as if the presenter is not in the room), beginning with the ways the plan seems likely to meet the goals, continuing with possible disconnects and problems, and perhaps ending with one or two probing questions for further reflection on the part of the presenter. These don't need to be in tight sequence, but participants should always begin with some positive feedback.
- The Presenter may walk around the room and listen in on groups, but remains s silent and doesn't answer questions or engage in back and forth conversation.
- Facilitator may need to remind participants of presenter's focusing question.
- Recorder takes notes on the warm and cool feedback.
- The group chooses one item of warm feedback and one item of cool feedback to share in the large group.

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6. Sharing Feedback in the Large Group (5-10 minutes)
- Each group shares one item of warm feedback (in a round). When the first round has been completed, each group shares one item of cool feedback (again, in a round, and going in the opposite direction).

7. Reflection (10 minutes)
- Presenter talks about what s/he has learned from the participants' feedback. This is NOT a time to defend oneself (this is for the presenter and defending isn't necessary), but a time to explore further interesting ideas that came out of the feedback section.
  At any point the presenter may open the conversation to the entire group (or not).

8. Debrief (5 minutes)
- Facilitator-led open discussion of this tuning experience, either in small groups or in the large group.

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Vertical Slice Protocol

Source: In 1996, the Bush Educational Leadership Program at the University of Minnesota worked with the Prairieville, Minnesota, school district to create the Vertical Slice (also known as the Minnesota Slice), which it used to capture student data for use in analyzing the purposes of education. Variations on this process include the Albuquerque Slice, created by school coaches from the National School Reform Faculty of the Annenberg Institute for the 1996 Fall Forum of the Coalition of Essential Schools; the Longfellow Slice; the Columbus Family Academy Slice; the "Day in the Life" Slice; the South Bend Slice; and the Hempstead Slice.

Overview: This protocol focuses on an examination of all the student work produced during a narrow time period by a sample of students in a particular school or district.

Other Uses: The Vertical Slice Protocol can be used for a variety of purposes, depending entirely on what the group engaged in the slice wants to know. It can be used to help educators understand students' perceptions of the school, some aspect of a problem or issue, how rigorous classroom work is, how interdisciplinary curriculum functions, and so forth.

Number of Participants: Any number of people can participate in this protocol, but groups of 20 or more might work better if broken into groups of 10 or so. If groups are broken up, it is important for them to consolidate their learning. The Vertical Slice can involve a single grade level or adjacent grade levels; subject area teachers; an entire school staff, including counselors and administrators; educators across schools, alongside district administrators; and parents and community members.

Time Required: Typically 1–2 hours for the planning meeting and 3–4 hours for analysis.

Steps:

Part 1—Planning Meeting: The planning meeting involves either the entire group that will be participating in analysis or a representative group. The steps for the planning meeting are as follows:

Step 1: Determining the Purpose of the Slice (up to 15 minutes)

Step 2: Determining a Guiding Question Related to the Purpose of the Slice (up to 15 minutes)

Step 3: Determining How Student Work Is to Be Obtained (up to 15 minutes). Each group will need to think of its own needs and design its own type of student work to collect. Here are some examples:

- One student's work throughout one day
- A sample of work from randomly chosen students in one grade on one day
- A sample of work from randomly chosen students across grades on one day
- A sample of work from one randomly selected student in the same grade in each of several schools
- Samples reflecting work from students at certain socioeconomic levels or levels of English fluency
- Samples of work from students enrolled in special education courses, AP courses, art classes, and so forth

Step 4: Identifying Other Aspects of the Work to Be Collected (up to 15 minutes). These aspects include the following:

- What the sample will consist of (e.g., work on paper, videos, artwork, photos, journals, audiotapes, student logs/reflections)
- Whether the context of the work will be examined in addition to the work itself (e.g., the assignment, the instruction leading up to the assignment, whether or not students worked together or individually)
- Whether the work will be anonymous or identified

Step 5: Deciding on the Duration of the Slice (up to 15 minutes). Although slices usually consist of a day's worth of work, consider collecting during a particular hour or a certain period of the day; alternatively, consider examining work that has been collected over a longer period of time (a week, for example) and then randomly selected for the analysis. Be careful not to collect too much work.

Step 6: Attending to the Logistics of the Collection Process (up to 15 minutes)

- Answer these critical questions: Who will collect the work? If random selections are to be made, who will make them? How will parents be informed of the process? Do they need to give permission for the school to analyze their students' work, even if the students remain anonymous?
- Organize the collection. If selecting at random from the collection, do so at this point.
- Make copies of the work so that everyone has the same final collection.
- Establish a time and place for the analysis and distribute this information to those involved.
- Gather refreshments and tools for analysis (paper and pencil, laptops, etc.).
- Decide on a facilitator.

Step 7: Determining How the Analysis Will Be Conducted (up to 15 minutes). Will participants scan all of the material and then focus on representative pieces? Will the dialogue be Socratic? Will groups be large or small?

Step 8: Determining Questions to Ask During the Protocol (up to 15 minutes). Here are some examples from the National School Reform Faculty ("Sample Sets of Questions for School/Grade Level Slice," n.d.):

- What evidence is there that students develop and apply essential knowledge and skills in challenging and meaningful ways?
- What evidence is there that … gaps exist within the curriculum?
- What evidence is there … of redundancy or unnecessary overlap within the curriculum schoolwide?
- What evidence is there that the student work builds on individual learning styles and skill levels of students and fosters student self-expression?
- What evidence is there that lessons encourage students to develop and apply problem-solving abilities?
- What essential skills and proficiencies in language arts, social studies, and mathematics are being applied or developed through the student work?
- What evidence is there that individual learning styles and skill levels are being incorporated into the lessons?
- What evidence is there … of thematic connections being made across the curriculum?
- What essential skills and proficiencies in language arts and mathematics are being applied or developed through the student work? (p. 1)

Part 2—Analysis (suggested times based on a 130-minute session):

Step 1: Preparation (up to 15 minutes). The facilitator establishes norms, facilitates introductions, and explains the process.

- If the group is large, the facilitator breaks the whole group into smaller groups for the purpose of analysis.
- The facilitator briefly describes the parameters and methodology of the protocol.
- The facilitator presents the guiding question for the discussion.

Step 2: Examining the Work (up to 50 minutes). Participants examine the work and take notes in silence. Small groups may examine different blocks of evidence in order to cover all the work presented.

Step 3: Discussion (up to 90 minutes)

- If the group is large, the facilitator leads one group in the discussion, using previously introduced norms, while the other groups silently take notes.
- Participants in each group share their thoughts about guiding questions and about any other questions that might have arisen during their examination; they also attempt to identify themes or trends.

- The process is repeated until each group has had a chance to lead the discussion. With each round, the discussion should become deeper as participants build on what they have heard.

Step 4: Framing Answers (up to 55 minutes). The whole group works together to frame some answers to the guiding question and to questions designed during the planning process.

Step 5: Debriefing (up to 15 minutes). The facilitator leads the whole group in debriefing. What have participants learned through this process, and why? What could be improved? The group identifies potential next steps for deepening the student work related to the guiding questions.

Critical Element: Guiding questions that are clear and focused. The questions under Step 8 of the first part of the process are clear and focused.

Tips for the Facilitator: This is a complex protocol and succeeds to the extent that it has been well prepared for. The facilitator needs help from individuals or groups, such as a representative design team, to plan the protocol so that its results are meaningful. The facilitator needs logistical support to make sure the process is smooth and efficient.