**Peer Coaching Guides**

The following pages contain peer coaching guides for use by pairs of teacher candidates, teachers, and by individuals as they inquire into models of teaching. These forms facilitate planning and communication between members of peer coaching groups who observe one another and try to profit from the observational experience. (For information about the peer coaching process and purpose, please consult Joyce and Calhoun, (2010). The forms can also be used to facilitate sharing of ideas by study group members, regardless of whether observation of one another’s teaching occurs.

Thus, they are addressed to both parties in the peer coaching process: the teacher who is planning and directing the teaching episode and the partner who is studying the model and helping both partners understand student responses. Both parties are involved in a continuing experiment on teaching. Each has the same purpose, which is to increase his or her ability to analyze the transactions between teacher and student and the ability to teach students how to learn information and concepts.

The guide is used to generate a productive interchange between peer coaching teams (usually two persons) over a specific teaching episode (about an hour) with one planning and leading the teaching and the other observing and studying the students’ responses to the phases of the model. We refer to one member of the team as the teacher and the other as the observer.

The guide is used both to assist the planning of the teaching episode and to focus the observation on student response to the key features of the model. The teacher prepares the observer by filling out the entries in the guide that are intended to make the planning clear. The observer fills in the observation checklist and discusses the result with the teacher. Both parties will profit most by making a partnership that studies the student responses and plans how to help the students learn more effectively. The observer is present NOT to advise the one who is teaching on how to teach better (both are novices with the model they are learning), but rather to learn by observing and to help their partner by providing information about the students’ responses.

When planning a session or lesson, skip through the guide to the entries marked “Tasks for the Teacher” and fill them in as needed. They will guide you through the model. Observers can use the guide to familiarize themselves with the plans of the teacher and to make notes about what is observed. Please remember, observers, that your primary function is not to give expert advice to your colleague, but to observe the students as requested by the teacher and to ­observe the whole process so that you can gain ideas for your own teaching. The teacher is the coach in the sense that he or she is demonstrating a teaching episode for you. When you teach and are observed, you become the coach.

Advance Organizer …. Page 4

Cooperative Learning …. Page 14

Synectics …. Page 21

Concept Attainment …. Page 31

Mnemonics …. Page 48

Role Playing …. Page 56

Inductive Thinking …. Page 64

PWIM …. Page 76

**Peer Coaching Guide:**

**Advance Organizer**

Before beginning a lesson, the teacher discusses what the observer might concentrate on. These are prompts for the observation, which leads to a discussion. Both parties are watching the students respond, which will be the focus of the discussion.

**The Teaching Process**

Most teaching episodes have both content and process objectives. The content objectives include the information, concepts, theories, ways of thinking, values, and other substance that the students can be expected to learn from the experience. The process objectives are the ways of learning—the conduct of the social and intellectual tasks that increase the power to learn. In the case of a model of teaching, the process objectives are those that enable the students to engage effectively in the tasks presented when the model is being used.

**Tasks for the Teacher**

**Content Objectives**

Please tell the observer the concepts and information that are the primary objectives of this teaching episode. What kind of information will be presented to the student? What concepts will be presented to organize the information? Are the concepts or information new to the students?

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**Process Objectives**

Please let the observer know any process objectives that are of concern during this episode. For example, are you trying to help the students learn how to comprehend and use organizers, how to relate material to the conceptual structure, how to tie new material to the organizers, or how to apply what is learned to new information and skills?

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**Phase One: Presentation of the Organizer**

The key aspect of this model is the use of organizing ideas to induce students to operate conceptually on the material they are trying to master. The teacher organizes the material with an intellectual scaffolding of concepts and presents those concepts to the students so that they can relate the new information to it—or reorganize familiar information within a more powerful conceptual framework. Although even the careful organization of information under a series of topics facilitates learning, we attempt to formulate organizing concepts that are at a higher conceptual level, so that students can process the information beyond associating it with a topic and think about the material at a more complex level than they would spontaneously.

Please describe the organizer (or system of organizers) and discuss how it will help the student conceptualize the material. How will you present the organizer(s)?

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**Phase Two: Presenting Information**

The purpose of the model, of course, is to facilitate the learning of material at any level of abstraction: data, concepts, theories, systems of thought—all the possibilities are there. The device is to place the student in the role of active receiver, getting information by reading, watching, or scrabbling around for information from formal resources or the environment. The information can be presented through readings, lectures, films or tapes, or any other mediated form or combination of forms.

Please describe the content that will be presented and how it will be presented. Emphasize the content you most want to be retained and how you want it to be applied in the future.

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**Phase Three: Connecting the Organizer to the Presentation**

The conceptual structure defined by organizers needs to be integrated with the information that has been presented and also reconciled with the students’ personal intellectual structures. Though the students, with practice, will accomplish most of these tasks by themselves, it is wise to provide activities that make the relationship between concepts and material explicit and that provide the students with an opportunity to reflect on the organizing structure.For example, we can illustrate the connection between one of the organizers and some aspect of the information and induce the students to suggest further associations and relationships. Or we can ask the students to reformulate the organizers in their own terms and indicate relationships between them and aspects of the material.

How will you make a presentation or provide a task to increase the possibility of integrating the organizing structure with the students’ conceptual structure as well as connecting the organizer and the material that has been presented?

**Phase Four: Application**

Sometimes information is presented to students as a precursor to learning a skill (we may teach musical notation to facilitate learning to sing) and sometimes to assist in solving problems (knowledge of mechanics may be applied to problems requiring leverage). We also apply what is learned in subsequent learning tasks (the general concept of equation is useful in mastering many mathematical topics).

Do you wish to provide an explicit application task at this point? If so, please describe it briefly.

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Finally, do you want to suggest a focus for the observer? If so, what is it?

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Now, after the observation, let's think about the observer's analysis of the episode.

**Tasks for the Observer**

**Phase One: Presentation of the Organizer**

First, please make a general comment about the students’ response to the organizer(s). Did they appear to absorb it? Did they appear to understand how organizers are to function and that their task is to learn new material and relate it to the organizer(s)?

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**Phase Two: Presenting Information**

Please comment on the student responses. Are the students clear about what they are to learn? Is it clear to you (thinking from the point of view of the students) how the organizer(s) may function in relation to the material?

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**Phase Three: Connecting the Organizer to the Presentation**

Please comment on this phase. Do the students appear to be clear about the organizing structure and its relation to the material to be learned?

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**Phase Four: Application**

If an application task is presented, please comment on the students’ ability to make the transfer to the new material.

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**Post Observation Discussion**

In most partnerships, leadership is shared. Sometimes the teacher has important issues to explore and those dominate the discussion. Sometimes some aspect of the students’ responses caught the attention of the observer. Sometimes the discussion ends with the beginning of planning for the next episode. However, the discussion should not be endless. Twenty minutes is usually sufficient for an adequate debriefing.

**Peer Coaching Guide: Cooperative Learning Organization**

Unlike the other guides in this series, this form to assist in the planning and observation of teaching is not built around a specific model of teaching. Thus, it does not deal with the specific cooperative learning strategies developed by Robert Slavin (1983) or Roger and David Johnson (2009), although the philosophy of the approach is similar. Nor does it deal with group investigation (Sharan & Hertz-Lazarowitz, 1980b; Thelen, 1960), the major democratic-process strategy that is covered in another guide. But it is true to their spirit.

The focus is on setting up a cooperative organization within which the specific models can be used. The substance is the organization of students into study groups and partnerships. Those groups can study a substantive area using, for example, an inductive learning model (as in Chapter 3. Thus, the cooperative learning organization in the classroom or other instructional venue provides a setting for cooperative study that can be employed in combination with many approaches to teaching.

The guide describes some options and asks the teacher to select from them or to generate others. The observer analyzes the students’ productivity and ­attempts to identify ways of helping the students engage in more productive ­behavior. The examples provided below are in reference to the inductive model of teaching. Using the two guides simultaneously may be useful.

**Organizing Partners and Teams**

Essentially, we want to organize the students so that everyone in the class has a partner with whom he or she can work on instructional tasks. For example, pairs of students can operate throughout the inductive model, collecting information, developing categories, and making inferences about causal relationships. The partnerships (which need not be long-term, although they can be) are collected into teams. For example, if there are 28 students in the class, there can be seven teams of four. We do not recommend teams larger than four. These teams can also operate using the inductive model, collecting and organizing data and making inferences. The partnerships provide an easy ­organization through which teams can divide labor. For example, each partnership can collect information from certain sources and then the information can be accumulated into a data set for the team. Similarly, team sets can be ­accumulated into a class set of data. Teams can then operate on these data sets and compare and contrast the results with those of other teams.

Team membership and partnerships can be organized in a number of ways, ranging from student selection, random selection, or teacher-guided choices to maximize heterogeneity and potential synergy.

Instruction of teams can range from explicit procedures to guide them through the learning activities to general procedures that leave much of the organization to the students. As in the other guides, the teacher gives the observer information about plans.

**Tasks for the Teacher**

How will you organize the class for this teaching episode? How many groups of what sizes will be selected?

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How will memberships be determined?

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What approach to teaching/learning will be used? If you are not using a specific model of teaching, what will be your instructional strategy?

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How will cooperative groups be used throughout the teaching episode? What cooperative tasks will be given to pairs, study groups, or the whole class? For example, if this were an inductive lesson, partnerships might collect data, classify it, and make inferences. Or, partnerships might collect data, but it might be assembled by the entire class prior to the classification activity. Partnerships might study words, poems, maps, number facts and operations, or other material. What is your plan?

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And, before the observation, do you want to suggest a focus for the observer? If so, what is it?

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**Tasks for the Observer**

After you have familiarized yourself with the plan, situate yourself in the room so that you can observe several students closely. Throughout the teaching episode, concentrate on the behavior of those students, whether they are working in partnerships, study groups, or any other organization. Then comment on their performance.

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Did they appear to be clear about the tasks they were to accomplish? If not, can you identify what they were not clear about?

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Did they appear to know how to cooperate to accomplish the tasks assigned to them? Is there anything they need to know in order to be more productive?

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Do they regulate their own behavior, keeping on task, dividing labor, and taking turns? Could they profit from having any aspect of group management modeled for them?

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What sort of leadership patterns did they employ? Did they acknowledge one or more leaders? Did they discuss process? Were they respectful to one ­another?

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**Post-Observation Discussion**

Following the episode, discuss the operation of the cooperative groups that the observer was close to. Is their productivity satisfactory? Their relationships? If not, see if you can develop a plan for helping the students become more productive. Remember that:

 1. Providing practice is the simplest and most powerful way to help students learn to work productively. This is especially true if they have not had much experience working in cooperative groups.

2. The smaller the group, the more easily students can regulate their own behavior. Reducing the size of study groups often allows students to solve their own problems. (This is also true for adults—peer coaching groups of two are more productive than larger groups; groups larger than seven usually can’t get anything done.)

 3. Demonstration gets more mileage than exhortation. A teacher can join a group and show the students how to work together. In fact, the observer can be a participant in a study group in future sessions.

 4. Simpler tasks are easier for students to manage. Breaking complex tasks into several smaller ones often allows students to build their skills through practice.

 5. Praising appropriate behavior gets results. If two groups are performing at different levels, it often helps to praise the productive group and then quietly join the less productive one and provide leadership.

**Peer Coaching Guide: Synectics**

This guide begins with tasks for the teacher, who is orienting the observer about the lesson. The next section is a guide for the observer of the teaching/learning episode. After the episode, the partners meet to discuss the lesson, particularly the responses of the students to the phases of the model.

**The Teaching Process**

Most teaching episodes have both content and process objectives. Content objectives include the substance (information, concepts, generalizations, relationships, skills) to be mastered by students. Process objectives include skills or procedures the students need in order to learn productively from the cognitive and social tasks of the model.

**Tasks for the Teacher**

**Content Objectives**

Please state the content objectives of the episode. What kind of learning will come from the activity? What is the nature of the area to be explored?

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**Process Objectives**

Are the students familiar with the model? Is there some aspect of its process where they need practice or instruction, and will you be concentrating on it in this lesson?

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**Phase One: The Original Product**

Commonly, synectics is used to generate fresh perspectives on a topic or problem, either for clarification or to permit alternative conceptions or solutions to be explored. Thus it generally begins by soliciting from students a product representing their current thinking. They can formulate the problem, speak or write about the topic, enact a problem, draw a representation of a relationship—there are many alternatives. The function of this phase is to enable them to ­capture their current thoughts about the subject at hand.Please describe how you will elicit the students’ conceptions of the area to be explored. What will you say or do to orient them?

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**Phase Two: Direct and Personal Analogies**

The core of the model requires the development of distance from the original product through exercises inducing the students to make comparisons between sets of stimuli that are presented to them (direct analogy exercises) and to place themselves, symbolically, in the position of various persons, places, and things (personal analogy exercises). The analogy material generated in these exercises will be used later in the creation of further analogies called *compressed conflicts.*

What stimuli will you use to induce the students to make the direct and personal analogies? Please describe the material and the order in which you will proceed to stretch the students toward the more unusual and surprising comparisons.

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**Phase Three: Compressed Conflicts and Oxymoronic Analogies**

The next task is to induce the students to operate on the material generated in phase two and create compressed conflicts. You need to be prepared to define compressed conflict, even if the students have familiarity with the model, and to continue eliciting material until a number of examples clearly contain the logical tension that characterizes a high-quality ­oxymoron.

Please describe how you will initiate phase three and how you will explain compressed conflict if you need to.

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Now we ask the students to select some compressed conflict pairs that manifest great tension and to generate some analogies that represent the tension. For example, we might ask them to provide some examples of “exquisite torture.”

Please describe briefly how you will present these tasks to the students.

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**Phase Four: Generating New Products**

The compressed conflicts and the analogies to them provide material from which to revisit the original problem or topic. Sometimes we select or have the students select just one analogy with which to revisit the original material. At other times multiple perspectives are useful. What course to take depends on a combination of the complexity of the original problem or concept and the students’ ability to handle new perspectives. For example, if a secondary social studies class has been trying to formulate potential solutions to a problem in international relations, we are dealing with a very complex problem for which multiple analogies are probably both appropriate and necessary. The task of helping the students share and assess a variety of analogies that can be used to redefine the problem and generate alternative solutions is complex, indeed.

Please describe how you will present the task of revisiting the original product. What will you ask the students to do?

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Now the new product needs to be examined. If the students worked as individuals or subgroups, the separate products need to be shared. If a problem is to be solved, new definitions and solutions need to be arranged. If written expression emerged, possibly it needs further editing. Unless the teach­ing episode is the conclusion of a topic of study, it generally leads to further study.

Please describe how products of the synectics exercises are to be shared and used. Will they lead to further reading and writing, data collection, or experimentation?

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Finally, do you want to suggest a focus for the observer? If so, what is it?

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**Tasks for the Observer**

**Phase One: The Original Product**

Please comment on the students’ response to the originating task. What is the nature of their conceptions?

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**Phase Two: Direct and Personal Analogies**

Please comment on the stimuli and the student responses. Did the students get “up in the air” metaphorically and generate less literal and more analogistic comparisons?

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**Phase Three: Compressed Conflicts and Oxymoronic Analogies**

Please discuss the students’ understanding of the concept of *compressed conflict* and their ability to select the higher-quality examples. Also, ­comment on the product of their attempt to generate oxymoronic analogies.

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**Phase Four: Generating New Products**

Please comment on the student products. What do you think has been the effect of the metaphoric exercises?

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Next, comment on the use of the new products. Are the students able to see the effects of the metaphoric activity? If they are asked to participate in further activities or to generate them, are they bringing to those tasks a “set” toward the development of alternative perspectives or avenues?

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**Comments on Student Training Needs**

It is the student who does the learning, and the greater the skill of the student in responding to the cognitive and social tasks of the model, the greater the learning is likely to be. Practice alone will build skill, and we want to provide plenty of it. After students are thoroughly familiar with the structure of the model, we can begin to develop specific training to improve their ability to ­perform.

Please comment on the skills with which the students engaged in the activities and suggest any areas where you believe training might be useful. Think especially of their ability to make comparisons, their ability to take the roles required to make personal analogies, and their understanding of the structure of compressed conflicts and how to use them. Thinking back on the entire experience, is there any area where specific process training should be considered?

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**Post-Observation Discussion**

Have a good discussion – and discuss where both of you will go next with this model and the unit you are currently teaching.

Good luck!

**Peer Coaching Guide: Concept Attainment**

The guide is designed to assist peer coaching partners as they work to master the concept attainment model.

**The Teaching Process**

Most lessons have both content and process objectives. Content objectives identify subject matter (facts, concepts, generalizations, relationships) to be mastered by students, whereas process objectives specify skills and procedures students need in order to achieve content objectives or auxiliary social objectives (e.g., cooperation in a learning task).

**Tasks for the Teacher**

**Content Objectives**

Please let the observer know the concept that is the objective of the lesson. What are its defining attributes? What kind of data will be presented to the students? Is the information or concept new to the students?

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**Process Objectives**

Are the students familiar with the model? Do they need special assistance or training with respect to any aspect of the process?

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**Phase One: Focus**

The focus defines the field of search for the students. It may eliminate irrelevant lines of inquiry. Often it is pitched at a level of abstraction just above the exemplars (e.g., “a literary device” might serve as a focus for the concept of metaphor). Formulating the focus is not easy. You do not want to state the concept or a name for it. But the students need some help as they focus on the exemplars.Please write the focus statement here.

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**Phase Two: Presenting the Data Set**

The data set should be planned in pairs of positive and negative exemplars, ordered to enable the students—by comparing the positive exemplars and contrasting them with the negative ones—to distinguish the defining attributes of the concept.

Please describe the nature of the exemplars. (Are they words, phrases, documents, etc? For example: “These are reproductions of 19th-century paintings. Half of them are from the Impressionists [Renoir, Monet, Degas] and the other half are realistic, romantic, or abstract paintings.”)

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Sometimes students are asked to record the progression of their thinking.

Do you want to do this?

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As the lesson progresses, we need to get information about whether the students are formulating and testing ideas. You need to ask them how they are doing without having them share their actual hypotheses.Please give an example of something you will say.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Phase Three: Sharing Thinking and Hypotheses**

When it appears that the students have developed hypotheses that they are fairly sure of, they are asked to describe the progression of their thinking and the concept they have arrived at.

When to do this is a matter of judgment. How will you decide, and what will you say?

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**Phase Four: Naming and Applying the Concept**

Once concepts have been agreed on (or different ones justified), they need names. After students have generated names, the teacher may need to supply the technical or common term (e.g., “We call this style *Impressionism*”). ­Application requires that students determine whether further exemplars fit the concept and, perhaps, find examples of their own.

An assignment to follow the lesson often involves the application of the concept to fresh material. For example, if the concept of metaphor had been introduced, the students might be asked to read a literary passage and identify the uses of metaphor in it.

Are you planning such an assignment? If so, please describe it briefly.

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**Tasks for the Observer**

**Phase One: Focus**

Did the teacher deliver the focus statement?

Yes [ ] No [ ]

In your opinion, was it clear to the students and did it function to help them focus on the central content of the lesson?

Completely [ ] Partially [ ] No [ ]

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How did the students respond to Phase One? Did students pay close attention to the focus statement and apply it to the examination of the exemplars? If not, is it worthwhile to give specific instruction? What might that be?

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**Phase Two: Presenting the Data Set**

Did students compare and contrast the exemplars? Did they make hypotheses with the expectation that they might have to change them? Were they using the negative exemplars to eliminate alternatives? Is it worthwhile to provide specific training, and what might that be?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Phase Three: Sharing Thinking and Hypotheses**

Were students able to debrief their thinking? Were they able to see how different lines of thinking gave similar or different results? Were they able to generate labels that express the concept? Do they understand how to seek exemplars on their own and apply what they have learned? Is it worthwhile to provide ­specific training, and what might that be?

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**Phase Four. Naming and Applying the Concept**

Please discuss how well the students were able to name the concept – taking into account its attributes and how effectively they could make suggestions for its use.

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**Post-Observation Discussion**

Teacher: Do you want to suggest a focus for the analysis? If so, what is it?

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As the discussion proceeds, process needs by the students is often a topic.

When it comes up, we need to consider that, in order to improve student performance, the first option we explore is whether it will improve with practice. That is, simple repetition of the model gives the students a chance to learn to respond more appropriately. Second, we directly teach the students the skills they need to manage the cognitive and social tasks of the model. Much of your discussion might be about training needs and how to manage them.

**Peer Coaching Guide: Inquiry Training**

Remembering that the episode will be followed by a discussion we have tasks for the teacher as the lesson is planned. Then, as it takes place, the observer has tasks relating chiefly to the responses of the students to the various phases of the model.

**The Teaching Process**

Most lessons have both content and process objectives. Content objectives identify subject matter (facts, concepts, generalizations, relationships) to be mastered by students, whereas process objectives specify skills and procedures students need in order to achieve content objectives or auxiliary social objectives (e.g., cooperation in a learning task).

The content objectives for inquiry training reside in the information, concepts, and theories embedded in the problem or puzzling situation that is presented to the students. They have to discover the information, form the concepts, and develop the theories. The skills to do those things are the process objectives, as are the social skills of cooperative problem solving.

**Tasks for the Teacher**

**Content Objectives**

What do you want students to gain from this task? What information, concepts, and theories do you wish them to learn?

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**Process Objectives**

Are the students familiar with the model? Do they need special assistance or training with respect to any aspect of the process? (For example, do they know how to obtain information through questioning? Can they work cooperatively with partners on a problem-solving task?)

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**Phase One: Encounter with the Problem**

The primary activity of phase one of the inquiry training model is the presentation of the problem.

Please describe the problem to be used in this lesson and how you will present it.

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**Phase Two: Data Gathering and Verification**

In this phase the students ask questions to gather information about the problem. As they begin, how well do you think they can distinguish between getting the facts straight and generating possible causal relations?

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**Phase Three: Experimentation**

If the students do not do so spontaneously, the teacher will introduce this phase by instructing them to begin to develop causal hypotheses. Please provide an example of something you might say at this point.

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**Phase Four: Formulation of Likely Explanations**

Now the students weigh the hypotheses and assess what are the most likely explanations of the phenomena. The teacher initiates the phase if this does not happen spontaneously. How might you do this?

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Please rehearse how you will initiate the phase.

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If students were successful in making inferences and conclusions about their data, the teacher may wish to push them a step further and ask them to predict consequences from their data by asking “What would happen if . . .” kinds of questions.

Please write one or two examples of hypothetical questions you might ask students about these data.

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**Phase Five: Analysis of the Inquiry Process**

In phase five the students are led to analyze their inquiry process and contemplate how to improve it. This activity provides the teacher with the opportunity to coach the students, explaining and even modeling how they can work together to collect and verify data, build concepts, and develop hypotheses and test them.

**Tasks for the Observer**

**Phase One: Encounter with the Problem**

Did the students understand the problem and find it puzzling? Were they able to ask questions to clarify it, and could they summarize it when asked to?

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**Phase Two: Data Gathering and Verification**

In your opinion, did the students understand the procedures they were to employ during this phase? Did they ask fact-oriented questions, and were they able to respond when the teacher modeled how to ask them? Could they distinguish between fact- and theory-oriented questions? How well could they “caucus” and summarize what they had learned and plan sets of questions to ask? Did they listen to each other?

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**Phase Three: Experimentation**

Please comment on the students’ ability to organize the information and build hypotheses. Describe their social behavior as well as their ability to respond to the cognitive tasks.

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**Phase Four: Formulation of Likely Explanations**

Discuss the students’ response to this task. Were they able to state hypotheses clearly, summarize the evidence, and, where appropriate, weigh competing explanations?

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Were students able to make logical predictions based on the forgoing categorization and discussion?

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For the whole episode, how did the students respond? What did they do most comfortably? Were there areas where they seemed stuck?

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**Post-Observation Discussion**

Teacher: Do you want to suggest a focus for the discussion? If so, what is it?

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Observer: Please comment on the skills with which the students engaged in the activities and suggest any areas where you believe training might be useful.

Frequently the conversation returns, appropriately, to the issue of the skills of the students. In order to improve student performance, the first option we explore is whether it will improve with practice. That is, simple repetition of the model gives the students a chance to learn to respond more appropriately. Second, we directly teach the students the skills they need to manage the cognitive and social tasks of the model.

As the discussion ends, planning for the next episode is on the minds of the partners.

**Peer Coaching Guide: Assists to Memory**

During the last 30 years there has been renewed research and development on strategies for assisting students to master and retain information. The science of mnemonics, as it is called, has produced some dramatic results (Pressley, Levin, & Delaney, 1982).

Rote repetition (rehearsing something over and over until it is retained) has until recently been the primary method taught to students for memorizing information and the primary method used by teachers as they interact with students. In fact, rote methods have become so used that they have become identified in many people’s minds with the act of memorization. To memorize, it is often thought, is to repeat by rote.

**Memorization Strategies**

However, although rehearsal of material continues to be one aspect of most mnemonic strategies, a number of other procedures are employed that greatly increase the probability that material will be learned and retained. These procedures are combined in various ways, depending on the material to be learned. Most of the procedures help build associations between the new ­material and familiar material. Some of the procedures are shown below.

**Organizing Information to Be Learned**

Essentially, the more information is organized, the easier it is to learn and retain. Information can be organized by categories. The concept attainment, inductive, and advanced organizer models assist memory by helping students associate the material in the categories. Consider the following list of words from a popular spelling series, in the order the spelling book presents them to the children:

soft plus cloth frost song

trust luck club sock pop

cost lot son won

Suppose we ask the students to classify them by beginnings, endings, and the presence of vowels. The act of classification requires the students to scrutinize the words and associate words containing similar elements. They can then name the categories in each classification (the “c” group and the “st” group), calling further attention to the common attributes of the group. They can also connect words that fit together (“pop song,” “soft cloth,” etc.). They can then proceed to rehearse the spellings of one category at a time. The same principle operates over other types of material—say, number facts. Whether categories are provided to students or they create them, the purpose is the same. Also, information can be selected with categories in mind. The previous list is, to outward appearances, almost random. A list that deliberately and systematically ­provides variations would be easier to organize (it would already have at least implicit categories within it).

**Ordering Information to Be Learned**

Information learned in series, especially if there is meaning to the series, is easier to assimilate and retain. For example, if we wish to learn the names of the states of Australia it is easier if we always start with the same one (say, the largest) and proceed in the same order. Historical events by chronology are more easily learned than events sorted randomly. Order is simply another way of organizing information. We could have the students alphabetize their list of spelling words.

**Linking Information to Familiar Sounds**

Suppose we are learning the names of the states. We can connect “Georgia” to “George,” “Louisiana” to “Louis,” “Maryland” to “Mary,: and so on. Categorizing the names of the states or ordering them by size or within region provides more associations.

**Linking Information to Visual Representations**

Maryland can be linked to a picture of a marriage, Oregon to a picture of a gun, Maine to a burst water main, and so forth. Letters and numerals can be linked to something that evokes both familiar sounds and images. For example, “one: can be linked to “bun: and a picture of a boy eating a bun, “b” to “bee “and a picture of a bee. Those links can be used over and over again. “April is the cruelest month, breeding lilacs out of the dead land” is more easily remembered thinking of an ominous metal spring, coiled malevolently over the spring flowers.

**Linking Information to Associated Information**

A person’s name, linked to information such as a well-known person having the same name, a sound-alike, and some personal information, is easier to remember than the name rehearsed by itself. Louis (Louis Armstrong) “looms” over Jacksonville (his place of birth). Learning the states of Australia while thinking of the points of the compass and the British origins of many of the names (New South Wales) is easier than learning them in order alone.

**Making the Information Vivid**

Devices that make the information vivid are also useful. Lorayne and ­Lucas favor “ridiculous association,” where information is linked to absurd associations. (“The silly two carries his twin two on his back so they are really four” and such.) Others favor the use of dramatization and vivid illustrations (such as counting the basketball players on two teams to illustrate that five and five equal 10).

**Rehearsing**

Rehearsal (practice) is always useful, and students benefit from knowledge of results. Students who have not had past success with tasks requiring memorization will benefit by having relatively short assignments and clear, timely feedback as they have success.

**Tasks for the Teacher**

**Planning with Memorization in Mind**

The task of the teacher is to think up activities that help the students benefit from these principles. A teaching/learning episode that can be organized at least partly by these principles contains information to be learned. Both teacher and students should be clear that a very high degree of mastery is desired. (The students need to be trying to learn all the information and to retain it permanently.)

Please identify the information to be learned by your students in some curriculum area within a specified period of time.

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Which principles will you emphasize in order to facilitate memorization?

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Will these principles be used as the information is presented to the students? If yes, how?

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How will rehearsal and feedback be managed?

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**Tasks for the Observer**

During the teaching/learning episode, situate yourself so that you can observe the behavior of a small number of children (about a half-dozen). Concentrate on their response to the tasks that are given.

Comment on their response to the tasks. Do they appear to be clear about the objectives?

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Do they engage in the cognitive tasks that have been provided to them?

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Can they undertake these tasks successfully?

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Do they appear to be aware of progress?

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**Post-Observation Discussion**

The discussion should focus on how the students responded and ways of helping them respond more effectively.

Practice frequently enables students to respond more productively without further instruction. Where instruction is needed, demonstration is useful. That is, the teacher may lead the students through the tasks over small amounts of material.

Tasks can be simplified in order to bring them within the reach of the students. We want the students to develop a repertoire of techniques that enables them to apply the mnemonic principles to learning tasks. Making the process conscious is a step toward independence, so we seek ways of helping the students understand the nature of the tasks and why these should work for them.

**Peer Coaching Guide: Role Playing**

**The Teaching Process**

Most lessons have both content and process objectives. Content objectives identify subject matter (facts, concepts, generalizations, relationships) to be mastered by students, whereas process objectives specify skills and procedures students need in order to achieve content objectives or auxiliary social objectives (e.g., cooperation in a learning task).

**Tasks for the Teacher**

Do you want to suggest a focus for the observer?

**Content Objectives**

What problem will be presented to the students, or in what domain will they construct a problem? Is the problem or domain of values new to the students?

**Process Objectives**

Are the students familiar with the model? Do they need special assistance or training with respect to any aspect of the process?

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**Phase One: Warming Up**

Role playing begins with a social problem. Often the problem is one in students’ own interactions or interactions with others in their immediate situation, or the problem may a real or student-generated human relations situation. Possibly the problem is one in their lives that simply needs exploration.

How will you present the problem to the students or help them develop it?

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**Phase Two: Selecting the Participants**

Please describe how the participants for the enactment (both role players and observers) will be selected.

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**Phase Three: Creating the Line of Action for the First Enactment**

How are you going to do this? Do you wish the first enactment to highlight certain aspects of values?

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**Phase Four: Preparing the Observers**

Once the characters have been identified and the story line generated, the observers are prepared.

What will you ask the observers to focus on?

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**Phase Five: The Enactment**

Now the students enact the problem for the first time.

**Phase Six: Discussion**

**If necessary you may have to say something to get the ball rolling. What might you say?**

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**Phases Seven and Eight: Repeating the Enactment**

From this point, phases five and six are repeated through several enactments. The teacher guides the students to ensure that the value questions are brought out.

**Phase Nine: Analysis and Generalizations**

When the teacher judges that sufficient material has been generated, a discussion is held (a cooperative learning format can be used for this phase to maximize participation, if desired) to ensure that the value positions are brought out and to put forth positions about what can be done to deal with the particular type of problem from a valuing basis rather than one of argumentation and conflict.

Please prepare the instructions you will give the students to inaugurate phase nine.

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**Tasks for the Observer**

**Phase One: Warming Up**

In your opinion, was the problem clear to the students? Were they able to understand the nature of the problem and the type of human relations problem it represents? Could they identify the players in the situation and how they act? Can they see the several sides of the problem?

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**Phase Two: Selecting the Participants**

**How did the students respond to being selected.? Did they seem ready and willing?**

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**Phase Three: Creating a Line of Action for the First Enactment**

Were the students able to generate a plausible and meaningful story line? Please note any difficulties they had.

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**Phase Four: Preparing the Observers**

**Did the obsrvers appear to understand what they were to do? Did they seem to be prepared to focus on the enactment?**

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**Phase Five: The Enactment**

How well did the students enact the roles? Did they appear to empathize with the positions they were to take? Were the observers attentive and serious? Comment on any problems either role players or observers had.

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**Phase Six: Discussion**

Were the students able to analyze the nature of the conflict and the values that were involved? Did they reveal their own value positions? Did they have any confusion about tactics of argumentation, skill, and values?

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**Phases Seven and Eight: Repeating the Enactment**

Please comment on the student performance in the ensuing cycles of enactments and discussions. Did the students become increasingly able to distinguish value positions?

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**Phase Nine: Analysis and Generalizations**

Please comment on the students’ ability to handle the analysis of values that are central in phase nine.

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**Post-Observation Discussion**

Following the teaching episode, the coaching partners might discuss ways of helping the students respond more effectively to the model. Remember that the early trials are bound to be awkward and that practice often does the trick. Also, problems can be adjusted to simplify the issues that have to be dealt with at any one time. Demonstrating the phases of the model to the students is also useful. The coaching partners can play the role of observer or even role player to give the students a model, or the two teachers can demonstrate together.

Please summarize the results of the discussion—the one or two chief conclusions you have reached to guide what you will next do as you use the model.

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**Peer Coaching Guide: Inductive Thinking**

**The Teaching Process**

Most lessons have both content and process objectives. Content objectives identify subject matter (facts, concepts, generalizations, relationships) to be mastered by students, whereas process objectives specify skills and procedures students need in order to achieve content objectives or auxiliary social objectives (e.g., cooperation in a learning task).

The content objectives for inductive thinking reside in the information and concepts embedded in a data set. Students categorize items in the data set by attributes held in common by subsets of items. For example, if the data set consisted of a collection of plants, students might classify plants by types of leaves (size, texture, patterns of veins, shape, connection of leaves to stems, etc.). Content objectives for this data set might include both information about specific plants and the building of a typology. Process objectives might include learning the scientific skills of the discipline (observation and classification) as well as the social skills of cooperative problem solving.

**Tasks for the Teacher**

**Content Objectives**

What do you want students to gain from this classification task? What, in your opinion, are the critical attributes of the data set? What categories do you bring to the set?

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**Process Objectives**

Are the students familiar with the model? Do they need special assistance or training in any aspect of the process? (For example, do students understand how to group items by common attributes? Can they work cooperatively with partners on a classification task?)

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**Phase One: Data Collection/Presentation**

The primary activity of phase one of the inductive thinking model involves collection or presentation of a data set. The teacher may provide a data set or instruct students to collect the data that will be categorized. The data that will be scrutinized by the students are extremely important, because they represent much of the information the students will learn from the episode. The choice between data collection or presentation is also important—if students collect leaves, a different set of data will result than if they had been presented with them. Once a data set has been collected by or presented to students, the teacher may want to set parameters for the classification activity by orienting students to relevant attributes. For example, if the data are plants, the teacher may wish to narrow the field of observation by having students classify by types of leaves. On the other hand, the teacher may wish to leave the parameters open and simply instruct students to classify by common attributes. Generally speaking, the more open-ended the instructions, the better the results.

Items from a data set may be included in only one category or in multiple categories. You may want to experiment with different instructions regarding the classification of data and observe differences in the categories that result. Generally speaking, leaving open the possibility of multiple categories of membership for items from the data set provides the most energy.

Please describe the data set to be used in this lesson. Will you provide the data set or have students collect data? If the latter, what sources of information will they use?

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**<H2>Phase Two: Concept Formation**

Once a data set is assembled and enumerated and students have been instructed on procedures for grouping the data, the teacher will need to attend to the mechanics of the grouping activity. Students may work alone, in pairs, in small groups, or as one large group. Working alone requires the least social skill, and working in small groups the greatest social skill. If one objective is to develop students’ abilities to work cooperatively, assertively defending their categories s but compromising when appropriate for group consensus, then students will need instruction and practice to develop these skills. If the teacher chooses to work with the entire class as a single group for the categorizing activity, he or she will need to exercise caution so that categories are not inadvertently provided for the students. Structuring students into pairs for the categorizing activity is the simplest way to have all students actively engaged in the task, although the teacher must again use considerable skill in keeping everyone involved while recording and synthesizing reports from the pairs. Teachers will probably want to experiment with different ways of structuring this activity. Pros and cons of each process can be discussed and problem solved with peer coaches.

Please describe how you will organize the students for the categorizing activity.

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Also, please describe how you will instruct the students to classify the data that you have provided or that they have collected.

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The names or labels students attach to groups of items within a data set will often accurately describe the group but not coincide with a technical or scientific name. For example, students may label a group of leaves “jagged edges,” though the technical term would be “serrated edges.” The teacher may choose to provide technical or scientific terms when appropriate, but not before students have attempted to provide their own labels.

For some lessons, the content objectives will be accomplished at the conclusion of phase two. When the teacher wishes to have students learn information by organizing it into categories and labeling it in order to gain conceptual control of the material, he or she may choose to stop here. When the objective is to learn what students see within a data set and what attributes they are unaware of, the grouping activity will suffice. However, when the objective is the interpretation and application of concepts that have been formed in phase two, the remainder of the inductive thinking model is appropriate. The final phases of the model result in further processing of the information and concepts embedded in the data set and should usually be completed.

**Phase Three: Interpretation of Data**

The purpose of phase three is to help students develop understanding of possible relationships between and among categories that they have formed in phase two. The class will need a common set of categories in order to work productively in this kind of discussion. Working off the descriptions of individual groups students have generated in phase two, the teacher asks questions that focus students’ thinking on similarities and differences between the groups. By asking “why” questions, the teacher attempts to develop cause–effect relationships between the groups. The success of this phase depends on a thorough categorizing activity in phase two; the length of this phase is comparatively short.

Although you will not know during your planning what groups the students will form, make a guess about possible categories they might construct, and then write two sample questions that would explore cause–effect relationships between those groups.

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If students were successful in making inferences and conclusions about their data, the teacher may wish to push them a step further and ask them to predict consequences from their data by asking “What would happen if . . .” kinds of questions.

Please write one or two examples of hypothetical questions you might ask students about this data set.

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**Tasks for the Observer**

**Phase One: Data Collection/Presentation**

Data are easier to group if enumerated. For example, the teacher might place a numbered card under each plant so that students may discuss plants 1, 4, 7, and 14 as sharing a common attribute rather than by plant names (which students may not yet know).

Did the teacher/students enumerate the data before attempting to categorize it?

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**Phase Two: Concept Formation**

In your opinion, did the students understand the criteria and procedures they were to employ during the categorizing activity? Did the teacher inadvertently give clues about what the “right” groups would be?

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Did the students work productively on the categorizing activity?

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If the teacher had the students work in pairs or small groups, did the students listen as other groups shared their categories?

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Were students able to explain the attributes on which they grouped items within categories?

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Were students able to provide names for their categories that reflected the attributes on which the groups were formed?

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**Phase Three: Interpretation of Data**

Were the students able to discuss possible cause–effect relationships among the groups?

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Did the teacher ask the students to go beyond the data and make inferences and conclusions regarding their data?

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If yes, were the students able to do so?

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If students were unable to make inferences or conclusions, can you think of any ideas to share with your partner that might help them do so?

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**Post-Observation Discussion**

Teacher: Do you want to suggest a focus for the analysis? If so, what is it?

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In order to improve student performance, the first option we explore is whether it will improve with practice. That is, simple repetition of the model gives the students a chance to learn to respond more appropriately. Second, we directly teach the students the skills they need to manage the cognitive and social tasks of the model.

At this point both teacher and observer might comment on the skills with which the students engaged in the activities and suggest any areas where training might be useful. Think especially of their ability to group by attributes and provide labels that accurately described the groups or synthesized characteristic attributes, their understanding of possible cause–effect relationships among groups, and their ability to make inferences or conclusions regarding their categories.

**Peer Coaching Guide:**

**Picture Word Inductive Model**

Peer coaches who are studying the PWIM model concentrate on the cycles, and these usually take three weeks or more.

Beginning Date of PWIM Cycle:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Description of Class (grade level, number of students, special needs): \_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Tasks for the Teacher**

A. Describe your picture

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B. List of words shaken out of the picture:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Words added to the picture word chart and word sets after the first  
round:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C. Examples of categories of words or phrases generated by students:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

D. Examples of categories or concepts selected by you for instructional  
emphasis:

Phonetic analysis categories or concepts:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Structural analysis categories or concepts:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Content categories or concepts:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E. Examples of titles generated by students:

From the picture:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

F. Examples of sentences generated by students:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

G. One of the informative paragraphs composed by you from student ideas:

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Be sure to do a think aloud with your students about how you put the ideas together to convey your message.

H. Sample(s) of student work: Be sure to take samples of student work, when they are available, to your sessions with your peer coaching partner and to designated sessions with the team as a learning community. You may take work from your whole class or group; however, we suggest you take, for collective study, the work of six students whose responses you are monitoring more ­formally and maybe more analytically than those of the whole class.

I. If you used tradebooks with PWIM cycle, list the title, author, and strategy used (if applicable).

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Number of lessons in PWIM cycle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ending date of PWIM cycle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Number of times you planned with your peer coach in this PWIM  
cycle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Number of times you or your partner demonstrated for each other with your peer coach in this PWIM cycle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<H1>PWIM: Studying Student Performance

Emphasis: Vocabulary Development

Description of six students whose learning is being studied formally as part of studying the picture word inductive model:

1. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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3. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

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5. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

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6. Name Birthdate Gender: F/M

Other information that would be useful to understanding the student, such as learning history, etc.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gender of Student** | **Total Number of Words** | **Date Asst.** | **Number of Words Read** | **Total Number of Words** | **Date Asst.** | **Number of Words Read** | **Gain** |
| 1. |  |  |  |  |  |  |  |
| 2. |  |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |  |
| 4. |  |  |  |  |  |  |  |
| 5. |  |  |  |  |  |  |  |
| 6. |  |  |  |  |  |  |  |

Post-Teaching Discussion

Teacher: Do you want to suggest a focus for the discussion?

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_