

Co-Constructing Classroom Resources

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A Tale of Two Rooms

CONSIDER WHAT IS ON THE WALLS of two different classrooms.

In classroom 10, the walls are filled with commercially produced posters, each beautifully illustrated and meticulously displayed on bulletin boards, along with a large timeline with many small-print entries. Maybe a teacher used some of his or her own dollars to make the space so appealing. In any case, it is clear that he or she has carefully planned this environment.

In classroom 12, there are flip charts, posters, Venn diagrams, and what looks like large, student-made booklets. With the exception of a globe, a couple of wall maps, and trade books, everything on the walls and tables seem to have been constructed in that classroom. The timeline subsumes many fewer dates than the commercially produced timeline poster in room 10, and the events are described in “kid language”—short phrases with

spelling corrections and additional markings by the teacher. The visual displays on the wall are a blend of student art, simple drawings by the teacher, and images cut from magazines. One booklet is held to the bulletin board by a pushpin. Students created all of the text and illustrations in

it. “How Could the Wool from this Sheep Become Your Coat?” shows the progression of events in the growing, manufacturing, and marketing of wool clothing. The booklet shows signs of having been read numerous times.

What is the observer to make of these



two different classrooms? Do you imagine that classroom 10 is in a privileged school and classroom 12 is in a low-income neighborhood? Would you label the teacher in room 10 as exceptionally professional and the teacher in room 12 as someone who simply gets by or waits until the last minute to plan a lesson? And what would you think of a teacher who could afford the resources in room 10, but has decided that the environment of room 12 is preferable—not for her sake, but for that of her students?

Observing Co-Construction

These issues became salient for us as we collaborated in the development of units

of study about cultural universals (food, clothing, shelter, transportation, etc.) for first- and second-grade social studies.¹ Our research team included two professors (Janet Alleman and Jere Brophy) who developed units of study on these topics and one teacher (Barbara Knighton) who brought each lesson plan to life in her classroom. Lessons were observed and recorded on audiotape. Later, the three of us reviewed the transcripts to evaluate various features of the lessons.

The professors noted that the teacher often created timelines, lists, graphs, or other visual displays with her students during a lesson, even if the written lesson plan did not call for such an activity. She posted these creations for students to use as resources during lessons and while working on assignments. She revisited these displays when reviewing content. We decided to examine this teaching method carefully.

Barbara begins a social studies lesson with a brief introduction to the topic. She defines big ideas and describes details at a level that first or second graders can understand. She energizes students with discussion about the topic. Then, under her guidance, students create a visual display (a timeline, poster, graph, booklet, or the like) that employs the content they are learning. Students may work on parts of the display individually, in small groups, or occasionally together as one class. We call this collaborative learning process co-construction of classroom resources. For example, in a unit on food, after explaining the sequence of events involved in bringing bananas from plantations in Central America to breakfast tables in the United States, she engaged her students in a pantomime and role play that reviewed these events. Students then made a six-page black-and-white book, “The Story of the Banana,” which Barbara duplicated for each student.

Asked about why and how she developed this approach to teaching elementary social studies, Barbara recalled that during her first few years of teaching, she would buy bulletin board sets or workbooks at a teacher’s store. She found them to be useful tools when she needed to post some key points of a unit or when she needed

to provide guided practice for a particular skill. Over several years, however, Barbara became somewhat wary of commercially produced materials because they often were narrow in scope, too “busy” (crammed with information), or likely to create misconceptions. She concluded that these materials had limited use.

Barbara initially developed co-construction as a way to interest and engage students in learning. She planned to take down the finished displays right after the lessons, but she left them up for a few days, and interesting things began to happen.

Interactive Learning

The co-constructed displays in Barbara’s classroom are different from commercial items, displays made by the teacher alone, or students’ independent work (which might be incomplete or include mistakes). They have the hand-made look of children’s projects, and yet their logic and construction belies the involvement of an adult.

Co-constructed resources are visually accessible to students. Barbara uses color, spacing, and other techniques to help students understand the content of the lesson. For example, a timeline’s linear logic is reinforced by a color code: blue=Very Long Ago; red=Long Ago; and green=Today. Once the piece is created, she will read it aloud with the students or “echo read” it (students and teacher taking turns reading aloud), making sure with occasional questions that students comprehend the information that is displayed.

The displays are not just art or decoration. The students use them. For example, during quiet reading time or independent work time, her students review the steps on a sequence chart or read class-made books such as “The Story of the Banana,” “Decisions My Family Needs to Make When Buying a Coat,” or “Different Houses.” One student uses a display to check the accuracy of a timeline she is drawing at her desk. Another student walks quietly up to a booklet to check the spelling of a word for his written assignment.

Finally, Barbara found that co-construction also gives students a feeling of ownership. They have command of the

information in the lesson. Co-constructed resources provide a basis for developing a common vocabulary to use in discussing the social studies content. During interactive segments of a lesson, students often refer to a display on the wall. As co-creators of that display, they are familiar with the content and often recall associated events that happened during an earlier lesson.

Expansive Thinking

These days, Barbara has found that she has more of these displays to post than places to put them. When she does remove co-constructions from the walls, the materials become part of the class library or learning centers (boxes of materials on a given topic) so that students can revisit them as needed during the year. For example, first grade students often reread a class booklet about cotton several months after completion of a unit of study on clothing. We overheard a student remarking (as she put down the home-made book about cotton) that she bet all cotton cloth had to be inspected. The class was then learning about laws and regulations during a unit of study about government.

Barbara observes that commercially produced materials often seem to constrain students’ thinking. For example, she put up a poster illustrating the character trait of “patience” with a cartoon of children waiting at a water fountain. Students could cite “waiting in line to get a drink” as an example of “patience”; however, they seemed unable to generate any other examples. Consequently, she now works with the students to create an illustration that shows children practicing patience in a variety of ways. The students provide most of the examples, while the teacher may provide one or two.

Barbara still uses some commercially produced materials, but she has become much more careful about her selections and usually prefers her own co-constructions. Sometimes she only uses selected parts of purchased displays (those that support learning of key ideas) or writes additional information on them.

Barbara has come to think of many of the co-constructed materials in her classroom as mobile resources. They don’t

Questions about Shelter

Shelter is a “cultural universal,” a human need that is addressed in some fashion in every human society. The teacher introduces the concept of “shelter” to a class of first grade students by inviting them to share what they may already know about the concept and to form questions about the concept. She uses their questions to co-construct a large poster.

Teacher: You might have noticed already that I put the word “shelter” up on the poster because for the next couple of weeks we’re going to be talking about shelters and learning about them. Shelter might be a word you’ve heard lots of, heard just a little bit, or not at all. So let me start out by asking if there is anybody who knows what the word shelter means.

Student A: It means like a house.

Teacher: (*Writes “house” under the word “shelter”*). You look like you’re thinking a bit more than just house. Did you want to add a little more? What else can you tell me about shelter?

Student A: It’s a place where you can live.

Teacher (*Writing the response on the board*): What things do you suppose we ought to try and find out about shelter? I want to give you a little thinking time, so get ready for a brainstorm of questions . . . What is it that you wonder about? Think about the shelter you live in. Is there anything you kind of wondered about that place where you live? Like how something works or why something is the way it is? (*The teacher writes down each student’s question.*)

Student B: Are most houses in countries the same?

Student C: Do they have basements in China?

Student D: How do they get fireplaces inside the house?

Student E: I’m wondering—how do they put stairs in them and what about under the stairs?

Student F: What materials do they use in different countries for houses?

The interactive discussion and listing of “I wonder” questions continues until every child has provided at least one question. The questions are posted and used as a checklist in future lessons.

The Functions of Shelter

The teacher co-constructs a concept map on a large sheet of paper posted on the wall during an interactive discussion around the functions of shelter.

Teacher: “There are at least three reasons why people have shelters. Tuck right up so I can tell you about them. One reason is to protect you from the rain and the cold. . . . Another is to have things that belong to you and you want them to be safe—to keep your things all together. A third reason that people have a shelter is because it gives your family a place to do things together, like cook and play and sleep.

“Now let me go back and talk about some of the things that fit those ideas. Protection. It was raining at my house pretty hard last night when I got home. There were some great big storm clouds. I got out of the car last night and went into my house as quickly as I could. That kept me safe and dry. So one of the things that a shelter does is it protects me from the weather.”

The teacher describes other examples of how shelters are useful. She then holds up books with illustrations of different shelters from around the world. She engages students in a discussion about these various shelters and how they might be functional in different climates and societies. Then she asks students to write down in their journals all of the things they were thinking with regard to the concept of “shelter.” The concept map that has been posted serves as a tool—both to trigger ideas and to provide correct spelling for some of the more difficult words, like “weather.”

For homework, the teacher asks students to read their journal entries to at least one family member—and to add any new ideas or examples that arise. One student returns to class with a fourth function for shelters: a home office for a parent’s career. Because teacher and students had created the concept map together, it was only natural to add this new information onto it. Thus, the idea of a family shelter serving as a possible place of work was added to the lesson.

Concept map for “shelter”:



have to stay on the wall—or even in the classroom. Frequently, she sends a journal, timeline, chart, or booklet home with a student so that parents can participate in their children’s learning. Families take turns using the co-constructed displays. Parents are encouraged to have students read from the resource and then describe, in their own words, what they have learned. There is also an unexpected benefit to this practice: parents can see for themselves, by looking at the co-constructed material, where their child stands relative to peers with regard to skills such as writing, drawing, and use of vocabulary.

Quick Thinking

Associated with co-construction is a pattern we observed throughout Barbara’s teaching: she listens carefully for cues from her students to get ideas for a list, poster, or chart that might help them better comprehend the content. Sometimes students’ remarks will cause her to shift plans slightly by revising a display or making up a resource on the spot. She also is able to tailor a co-constructed display to assist students’ understanding of complexities or variations. For example, she worked with students to make a poster of different kinds of families (for example, nuclear, blended, single-parent, and adoptive), create a set of pictures showing different communication devices, and brainstorm a list of various modes of transportation.

Instead of trying to teach graphing skills using graphs with arbitrary information on them (that is, data for use in that exercise only), Barbara prefers to work with students to co-create a graph that relates to a

social studies lesson plan. Likewise, Barbara would decline to use a Power Point presentation for an elementary social studies lesson. She does not think that a computer image projected on the wall confers any special advantage over low-tech graphic materials for young children. Besides, the images are gone when you turn off the computer. She’d rather have a co-constructed poster on the wall that she can point to during class or grab and give to a student to take home for the weekend.

Benefits of Co-construction

In Barbara’s classroom, the displays on the wall are tools, not static displays, or ends in themselves. Graphs, charts, and maps depict interesting information that students and teacher refer to repeatedly over the weeks. In summary, when teacher and students co-construct a resource in the classroom, it benefits both parties in several ways:

- Students feel energized and involved (as opposed to feeling passively forced);
- Student participate in the lesson and engage the content (since they are using what they have learned to create something new);
- Students render the content in their own words (making it easier for them to understand, remember, and work with later);
- The teacher relates with students as a member of a learning community (rather than only as an authority figure who stands above and apart).
- Teacher and students have a visual display that they can use in the future (for

reference, review, and example).

By the end of an academic year, Barbara and her first grade class have co-constructed some 40 booklets plus a host of other learning materials including timelines, Venn diagrams, charts, graphs, lists, concept maps, and so forth. She gives each student several items to add to his or her memory box (a shoe box which students take home to keep), and she keeps a few for her own records.

When the next school year begins, Barbara always has on hand large sheets of paper, tape, scissors, a yard stick, and colored markers—even if a particular lesson plan does not call for these materials. She never knows when, midway through a lesson, she might suddenly feel inspired to co-construct a chart, a timeline, or a concept map with the students to help them remember specific facts, imagine a distant time or place, or understand a larger concept. It keeps everyone in room 12 on his or her toes. 📖

Notes

1. Janet Alleman and Jere Brophy, *Social Studies Excursions, K-3*, vol. 1-3 (Portsmouth, NH: Heinemann, 2001, 02, 03).

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