



Project: Analytical Cubism

Crafting Beautiful Work

*Ron Berger
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Ron Berger has had an enormous influence on how High Tech High and many other schools across the country think about project-based learning. His approach is to engage students in the creation of “beautiful work” by showing them models, eliciting multiple drafts, and employing classroom critique as an instructional strategy. Ron joined Ben Daley and Rob Riordan of the GSE faculty in February 2008 for a conversation about his ideas, his teaching practice, and his work with educators.

INTERVIEWER

When did you begin to think of *beautiful work* as an organizing principle? It’s something you rarely hear teachers talk about.

RB

I don’t know when I began using the term, but it is a good descriptor for my passion because it applies to work in math and science and all disciplines, as well as artistic work. The notion is that what you do should be accurate and elegant; you should be proud of your work. And you’re right: beautiful work is exactly what you don’t hear discussed in conversations about education and test scores. It’s always left out.

INTERVIEWER

How did you get started doing projects with students?

RB

For 28 years I was in a school community that used no textbooks. It was a project-based school and the curriculum was crafted by teachers, so there had to be continual discussion among the staff about what we were working on, continual peer critique, and helping each other shape curriculum. I think it would be very hard to do this well in isolation.

We were drawing off the heritage of Dewey really. Elliot Wiggington's Foxfire project was a particular inspiration for the idea of not only doing projects, but also having students empowered to run those projects and refine them for an authentic audience of people outside the classroom who really cared about quality. But there was also a tremendous history of project-based learning in the U.S. that I learned from.

For me, a lot of that heritage came from the arts and architecture. As a self-employed carpenter I designed homes and additions, and you would never do blueprints for anything without an incredible amount of critique from the homeowners, from engineers, from other builders, from architects. That process of many different iterations of the project and many improvements along the way was the ethic of what we did. And that ethic, of being a craftsman and carpenter and trying to do things really well, certainly spilled over into my sense of what a classroom should be.

INTERVIEWER

One aspect of your work that was new for us is the notion of using critique as an instructional technique to get at notions of quality, rather than simply to help a student with an individual piece of work. How did you develop that strategy?

RB

As an undergraduate visual arts major for a time, I sat through many, many group critiques of student artwork. They weren't always done with care for the emotions of those involved, and in fact were sometimes quite cut-throat, but what didn't escape me was the power of that structure, both for improving the quality of a piece of work and for setting standards for the dimensions of work that we cared about. I learned more in group critique than in any lesson, because that's where the great insights of a good art professor or a fellow student really came out. And it just seemed like that's the perfect structure for making anything better. We can use it to look at a wide range of work, from science experiments to math solutions to essays or stories.

The process also touches on something beyond critique: the use of models, so that kids have a vision of where they're trying to go. That has been one of the great learnings for me of the last twenty years. There is almost no area where models don't increase the quality of what we do. We assume that if we explain a project clearly enough in words, then kids will know where we want them to go. But it almost never works that way. In the absence of a model and a picture and a vision of what we want the final product or performance to be,

even the clearest rubric is not particularly useful.

When you grow up watching basketball on television you have a model of quality play, and you can say, “I know what Michael Jordan looks like and that’s what I want to be. Those are the moves I want to have.” But if someone gave you a rubric of what a good drive to the hoop would look like, and you had never seen a basketball game, it would be useless for you.

INTERVIEWER

What are you thinking about now as you’re working with schools?

RB

It’s been a very humbling experience over the past five years trying to support teachers and schools to collect good models and run good critique sessions. I’ve realized that it’s harder than I thought and that a lot of it was intuitive for me. My task now has been to articulate the qualities that make those processes go well. Just having critique sessions doesn’t mean that they’re going to go well, and collecting models of student work won’t automatically improve student work. There are vast differences in the models that you collect and how you use them. What I’m learning is how crucial some of those decisions are. For example, I’ve coached teachers to do critique sessions and then gone back to their classrooms to find that they’ve chosen very poor models that aren’t compelling or evocative of the features that they’re looking for students to create. And I’ve seen teachers who don’t realize that the critique is really a lesson. And so they turn it over to the class, and it gets off on tangents, and the teachers don’t feel empowered to re-direct the critique session to be an effective lesson for kids.

INTERVIEWER

Why do you think it is so hard to convey your knowledge and experience to teachers? What’s going on in their lives, in schools, or in that interaction that makes it difficult for them to catch on quickly?

RB

Here are a couple things that get in the way. In my work with Expeditionary Learning, a lot of our work has been on new assessments for learning practices. And the most powerful of those is for teachers to have really clear learning targets for their lessons. But *learning target* is not just a new term for goal or objective. It means taking a lesson goal or state framework and putting it in kids’ language and making it transparent to the kids, so you’re saying to students, this is what we’re trying to learn today. This is where we want to get.

What’s become clear to me is that a lot of teachers don’t actually have that much clarity. Their learning targets are often vague. And if they don’t know exactly what they want to come out of it, then it’s really hard to prioritize which features in the piece of work they



Project: Electric Duets

want to really home in on. If you're going to drill down on something, it has to be the thing that is your key learning target for that concept or that lesson or that day.

When I observe teachers doing lessons, I'll often interview them afterwards and say, "What was the most important thing that you wanted them to get out of that lesson?" And they'll just look blank for a moment and then say, "Well, there's a lot of things." But they haven't really thought ahead enough to be able to say, "When they leave this room, I really want them to have *this* clear." And if that were clear before their lesson, everything would have gone differently. I think that applies equally to a critique session or the use of models. Why did you choose that model? What is it you want to use it to show? Why are you showing it? It's about having that level of clarity.

Another thing that gets in the way is that a lot of teachers are afraid to be candid with their students about quality. A habit grows in classrooms of just complimenting kids, like, "Great work, Ben," or "This is really good," or "Nice job on that paper." But to make another sports analogy, the coaches that are the greatest coaches, that kids respect the most, tend to be the toughest ones. Not mean, but the clearest and toughest. The ones that say, "You're doing that all wrong, you've got to rethink this, or that was *terrible* today and it was absolutely terrible for these five reasons." I think people are afraid of candor with kids because they feel like they don't want to fight with them; they don't want to hurt their



Project: Build a Better Mousetrap

feelings; they don't want to step on them. I think that's a big mistake. I don't think clarity and candor means meanness or hurting kids' feelings. If you can be very specific about what's working in a piece of work and equally specific about what's weak, it's a gift to the student who created it.

Here's a perfect example: I conducted what I thought was a very effective critique session with a class of fourth grade kids, and the teacher was so excited about it that he wanted to take it on himself. He asked me if I'd come observe a couple weeks later. When I returned, he did a session using three models of work that he had collected from the kids. His method had been to rotate the kids through so that each got their piece used as a model for class discussion. That approach worked in terms of equity; every kid got equal airtime. But with a class of 28 kids you had 26 mediocre pieces, each of which was going to get a lot of airtime, three a day. It was wasting kids' time to spend day after day looking at mediocre pieces when there were only two that were actually worth looking at. And if I had been the teacher, I would have said, "Guys, this was a very difficult process to start and there's really great news. It really worked for two people. I thought it might not work for anybody, but there are two examples that came out yesterday that are really worth looking at as a class, and that's really exciting, and it happens to be Rob and Ben today and this is really terrific." It's important to be honest about it and not pretend that other kids succeeded when they didn't. So I felt like this teacher was just wasting their time looking at mediocre

papers in the interests of kindness and equity, but it's not kindness to me.

INTERVIEWER

What did you say to the teacher afterwards?

RB

I told him that if you give your assignment to 28 kids and not a single one comes up with something that you think worked well, then you've got to say that. And you don't blame the kids; you blame yourself. Because in truth it was your fault! You say, "So I gave this assignment yesterday and I got 28 papers back and not a single one worked, so I think I really failed. I didn't explain something clearly so I've got to re-frame it for you and you've got to give me another chance; we've got to try this again"—rather than assume that since you assigned it, it's worth critiquing all 28 papers.

It's all about having high standards and keeping to them, owning them with the kids and not pretending success is there when it's not. That success is going to emerge in unlikely moments for individual kids in ways that are great to celebrate in big and small ways. If you're feeling bad for Ben because his work has not been very good but he's been trying hard, it's still best not to give him false reasons to celebrate the work. When one day there's one small feature of Ben's work that's really stellar, that's when you pull it out and say, "I've just got to tell you guys that there were a lot of essays done yesterday and I've got to show you one from Ben, and it's not perfect, but the opening line or the closing was so incredible and let me read it to you and let's look at why it works." You wait for the legitimate moment when you can honestly celebrate Ben having created something terrific, even if it's a tiny portion of the work.

INTERVIEWER

Is there anything else that gets in the way as you work with teachers?

RB

A lot of teachers don't have good models of work. They don't have something of high enough quality for kids to aspire towards. For example, I always had kids do reflections on themselves as writers, but the kids tended to be very shallow in their self-assessments as writers or workers or students. And I was at a teacher group meeting at Harvard, complaining, "Well, I read really good reflections from some of your classrooms, but my students tend to be shallow and brief in their self-assessments as thinkers." And one of the teachers asked, "Have you shown them models of what really good reflective writing looks like?" And I said, "No I haven't. I don't have any." And she laughed and said, "You spend your time telling people to use models and *you're* not using them, and now you're wondering why your work doesn't look good?" And it occurred to me that my students had never seen a model of really thoughtful reflection, and I didn't have any. So I borrowed one that was really powerful. It wasn't from my class, and it wasn't from a 6th grader, but

when I used it with my students, this light went off for all of them that was like, “Oh, this is what good reflective writing looks like.” And I realized that the impediment to them doing high quality work all along had been me. It had never been their capacity. It had been my inability to show them a model of what I had hoped they would get to. And as soon as I showed them the model, everything changed. It was as if they said, “Oh, this is where you want us to get to. OK. Let’s analyze it and figure out why it worked.” I just hadn’t provided them with a good model.

INTERVIEWER

If I’m doing a new project that I’ve never done before, how do I go about getting models?

RB

First of all, think about which projects you’ve done that are similar, where you had stellar work, where you can say, “This isn’t exactly the same project, because that was a memoir project and this is a historical biography, but let’s look at how voice is used in this or let’s look at how organization is done in this.” It’s better to use a model that’s similar than no model at all. If you have a vibrant professional community like I luckily had in my school and you incredibly have in High Tech High, you can borrow models from your colleagues, even if it’s not the same grade level. Do whatever you can.

Another approach is to get models from the professional world. That sometimes works very well and sometimes doesn’t. There are occasions in which models from the professional world are perfect, especially with secondary kids, as they should be able to get close to that anyway. But sometimes models from the professional world are just a little too distant for kids, and for them, to see a ninth grade essay that’s stellar is more powerful than reading an adult essay from the L.A. Times.

INTERVIEWER

What sustains you in this work?

RB

What sustains me is that I love running critique sessions with students and then returning to that school and seeing the kids proud of their beautiful work, saying, “Look at how it turned out. We did this!”