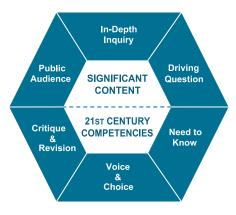
Why We Changed Our Model of the "8 Essential Elements of PBL"

John Larmer and John Mergendoller Buck Institute for Education, May 2015



Back in the day — September 2010 to be exact, but it feels like long ago — the Buck Institute for Education (BIE) published an article entitled "7 Essentials for Project-Based Learning" in ASCD's Educational Leadership magazine. Soon thereafter we added an eighth element, "Significant Content," to counter stereotypes that PBL was not an effective method for teaching standards-based knowledge, understanding, and skills — and to remind teachers to design projects with a clear focus on content standards. These "8

OLD MODEL for PBL:



Essential Elements of PBL" became the framework for our publications and "PBL 101" workshop, which has now been experienced by over 50,000 teachers. That article, and the hexagonal graphic above, has been widely circulated and cited over the past few years.

In 2014, however, we decided a revision was needed, and developed a more comprehensive, research-based model that we call "Gold Standard PBL." With PBL's growing popularity, we worried that if too many teachers and schools jumped on the PBL bandwagon without clear guidance and adequate preparation, problems will crop up. A lot of practices and curriculum materials labeled as "PBL" will not be rigorous or even truly PBL, and yield disappointing results. Some "projects" will really be only "hands-on

activities." Poorly designed and implemented projects could frustrate students, disappoint teachers, and damage PBL's reputation. PBL could become another fad on the trash heap of failed efforts to transform education. We believe a Gold Standard PBL model will help ensure this does not happen, and we look forward to seeing high-quality projects in all classrooms, in all settings, for all students.

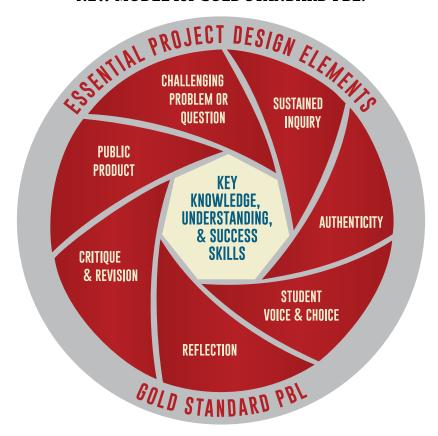
What we call the new model

In our new conception for Gold Standard PBL, we have created two separate but related components of the model: Essential Project Design Elements, and Project Based Teaching Practices. We call them the Essential Project Design Elements because that's precisely what they are—not the "elements of PBL" the instructional methodology, which is a much broader topic than the design of a project itself. The Project Based Teaching Practices expand on what it means to implement PBL well, beyond designing the project. You can read more about our new model in another post, but as you can see in the diagram below, while some of the familiar "8 Essential Elements" remain, others are gone. Let's explain where they went and why.

What's gone and what replaces it

■ From Significant Content to Key Knowledge and Understanding. To describe the student learning goals that are the central focus of a project, we think the word "key" still captures the idea that what students learn should be significant, in terms of state or local standards and what's important to students, teachers, schools and districts. The term "knowledge and understanding" means the same thing as "content" but says it in more everyday language, since we want to use as little edu-jargon as possible for a broad audience.

NEW MODEL for GOLD STANDARD PBL:



- From 21st Century Competencies to Success Skills. Our older model separated this element from content—albeit with a dotted line, to indicate a connection—but we now combine the two into one set of student learning goals. Recent standards now explicitly include such competencies as critical thinking, problem solving, collaboration, and making presentations; they are to be taught together with content, since students need to, say, think critically about something, such as history, science, math, literature and other text, and so on. Furthermore, we think the term "success skills" is more readily understood by all audiences, and has less baggage, than our older language or other terms such as "college and career readiness skills."
- From Driving Question to Challenging Problem or Question. Our new model defines the fundamental element of a project—what it is "about"—more broadly as a "challenging problem or question." This may be expressed as a "problem statement" in classrooms and schools where problem based learning is the preferred style of PBL. In

- other settings, teachers may prefer to organize projects around an "essential question" or "design challenge." Although we welcome multiple ways to describe what a project is about, we continue to suggest in our PBL workshops and project design materials that teachers operationalize the challenging problem or question by putting it in the form of a student-friendly, open-ended "driving question" to focus the project.
- Inquiry is pretty much, by definition, not a superficial process. So instead of depth, we decided to emphasize the point that in PBL, inquiry should take place over an extended period of time. Students could, during a not-at-gold-standard project, investigate a topic in depth but only on one occasion. But by extending inquiry over several occasions, students have enough time to engage in an iterative process that involves questioning, finding and evaluating sources of information, posing new questions, and applying what has been learned to the solution of a problem or creation of a product.

- From Public Audience to Public Product. It's hugely important both for motivational reasons and to make learning visible and discussible that students make their work public in a project. It adds to a project's authenticity. But we don't want to suggest that students always have to make a formal presentation to an audience. There are others ways to make work public; students can put it online, display it on a wall, or provide a product or service that is actually used by people in the real world.
- Goodbye Need to Know. The fact that an engaging project creates a genuine "need to know" in a learner is one of the most powerful arguments for PBL. As opposed to learning for the sake of a test, grade, or approval from teachers and parents, students in PBL are motivated to learn because they want to successfully complete the project. However, we think this term belongs in a "Why PBL?" argument, not as a thing teachers design in a project they way they would, say, an authentic product or opportunities for student voice and choice. This concept also was easily confused with the "need to know list" used as a tool in a project. Instead, our Gold Standard PBL model places a list

of student-generated questions (which is initiated by an entry event that launches a project) as part of the "sustained inquiry" process. The list of student questions could still be given the heading "What do we need to know?" or it could be called something else, such as a KWL (Know, Want to Learn, Learned) chart.

Two new elements — and where to learn more

Hello Authenticity and Reflection. BIE's Essential Project Design Elements contain two new items, both of which are familiar to those who know PBL. One is "authenticity," which has to do with how real-world the project is. The other is "reflection," which we have previously coupled with "revision" but now stands on its own; students should reflect on what they're learning, how they're learning, and what they have accomplished in a project.

To learn more about the Essential Project Design Elements as well as Project Based Teaching Practices, read our blogs on Gold Standard PBL and see our new book (published by ASCD), *Setting the Standard for Project Based Learning*, at **bie.org**.