

A #REALPBL EBOOK

#REALPBL
DELETED SCENES

EXCERPTS THAT DIDN'T MAKE IT
INTO THE BOOK'S FINAL DRAFT

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Background Information: The book's Introduction was probably the most difficult part to write, which is why two of this eBook's excerpts are from the Introduction. In the Introduction, we wanted to include a few reasons as to why project based learning should be prioritized, but we don't want to alienate the reader by getting too technical too soon. This section, from the Introduction, is a personal favorite due to its emphasis on Reading and Writing Workshop. However, it was removed because (1) it could be confusing for those who aren't familiar with workshop, and (2) it could turn away those who aren't fans of workshop. Ultimately, a portion of this section was used elsewhere in the Introduction.

PBL Provides Context for Student Learning (Much Like the Workshop Framework)

In both of our school districts, Reading Workshop and Writing Workshop are used for the teaching and learning of literacy. Zooming in on the workshop framework, using narrative writing as an example, a typical instructional unit (unit of study) could follow these steps. As you read, even if you don't use workshop, think about how these steps might parallel your experiences with project based learning or how these steps could transcend literacy:

1. Through the collective analysis of exemplars, the teacher introduces the unit's genre, narrative writing, to students. Amongst the discussion, she gives each student a handout containing the unit's learning targets - what students should be learning and applying as they write.
2. Over the next 4-6 weeks, the teacher engages students in a series of mini-lessons, lasting about 10-12 minutes each. Each mini-lesson focuses on a very specific aspect of narrative writing: writing a lead, introducing characters, inserting transitions, helping readers to visualize, etc.
3. After each mini-lesson, students are given about 25 minutes to write in their writers' notebooks; it doesn't matter what they write as long as they're personal narratives and students are working toward the learning targets. During this time, students can use what they've learned from mini-lessons to enhance their work. Also during this time, the teacher meets with students, individually and in small groups, to help them to move forward with their writing.
4. As the teacher meets with students, sometimes she will notice many students are struggling with the same concept. She addresses the misconception by having the entire class stop their writing so she can teach (or reteach) the concept to everyone.
5. Most lessons conclude with a 5-minute meeting, during which some students read parts of their work so everyone can learn from one another. Oftentimes the teacher will ask specific students to read certain excerpts to demonstrate what particular concepts look like in action.
6. Over the 4-6 weeks, as students write in their notebooks, some pieces may resonate while others may fall by the wayside. The ones that resonate, about 2-3 for the unit, are taken through the entire writing process: revising, editing, publishing.

We tend to think about instructional approaches in isolation, and even though the workshop framework can be leveraged in powerful ways when teaching literacy, we usually don't consider how this same framework can be applied to other subject areas. Nonetheless: **Proven practices in one subject area can typically be used in others with the same success.** For example, project based learning closely resembles the workshop framework - an actuality that is regularly an "AHA moment" amongst educators who are familiar with workshop but not necessarily project based learning. In fact, when designing project based learning experiences, we have heard educators refer to it as "Workshopping [insert subject area]."

More specifically, workshop and project based learning have the following in common:

- Student work time is kept to a maximum, while direct instruction is kept to a minimum and used, when needed, to take students from where they are to where they need to be.
- Students generally work toward the same learning goals with flexibility regarding how to get there.
- There are planned opportunities for students to learn from one another.

Finally, and perhaps most importantly, much like workshop, project based learning provides context for student learning - context that includes more than just a topic. After the topic is introduced, students continuously apply what they've learned to their projects and learning goals.

In project based learning this context is crucial as (1) it serves as the glue that holds the learning together, and (2) students develop a deeper understanding of content as they engage in productive struggle when applying their learning to their projects. Without this context, the direct instruction would have nothing to latch onto and therefore possess far less substance. As [Katie Wood Ray](#) (1999) explains in *Wondrous Words*:

We need units of study where our focus lessons over a period of time work together to build big, important understandings...Without units of study our focus lessons become a hit-and-miss series of bits of teaching, isolated sound bytes that don't come together into larger, more lasting understandings. (p. 212)

A PBL unit comes with context that includes a topic, at least one project, and learning goals, and it also tends to include High Impact Takeaways and an Umbrella Question (which we'll discuss in Chapter 3). However, too much learning only includes a topic. Here's what such a unit may look like:

1. Teacher introduces a topic, such as the three branches of government.
2. Students are exposed to said topic through a series of lessons, which may or may not be distributed as a packet. As students learn, formative assessments help guide instruction.
3. Students are tested on the information they learned from the lessons.
4. Everyone moves onto the next unit.

While there are several problems with this approach, here are three to consider: the entire unit, or the majority of it, is laid out with disregard for the students on its receiving end - an eerily similar unit may even be taught again next year; unless students are in love with the three branches of government, there's no incentive for them to learn the material other than to do well on a test; never is it clarified for students what they should *know*, *understand*, and *be able to do* as a result of studying the three branches of government. Therefore, the unit lacks true direction and feels as if the teacher is trying to cram a complex topic into inadequate instructional time by feeding students facts that they are then required to regurgitate.

Proven practices transcend subject areas. And we think students could benefit from schools and districts (1) establishing a definitive list of practices that should transcend subject areas (e.g., learning targets, effective feedback, student voice and choice, etc.), (2) defining these practices, (3) deciding what it should look like when these practices influence student learning (not necessarily teacher instruction), and (4) working together to collectively reinforce these practices.

Ray, K. W. (1999). *Wondrous words: Writers and writing in the elementary classroom*. Urbana, IL: National Council of Teachers of English.

Background Information: Here's the final section from the Introduction that didn't make the cut. Whereas the previous two sections stuck around for awhile, this one was written and then deleted shortly thereafter. While we believe the problem posed by this section - tech addiction - is worth addressing, it is covered throughout the book, in one way or another.

PBL Helps Us Overcome Tech Addiction

Toward the beginning of both of our teaching careers, we admittedly participated in what we now call "the technology pissing contest." In short, we were always on the lookout for "cool tools," and we wanted to be the first ones to use them at our school, even if we had to construct overly contrived activities.

Take, for example, these directions from an iPad project:

Using iMovie, shoot a silent scene of two actors portraying characters from a novel. Save the video to your Camera Roll. Open the Tellagami app, and use a solid green image as your background. Have the avatar in Tellagami explain what is going on in the silent movie scene. Finally, use DoInk Green Screen to combine the video created with iMovie with the Tellagami commentary. Save the finished product to the Camera Roll.

When we teach in this way, and we just have to use certain technologies with our students, we plan by “beginning with the technology in mind,” as opposed to planning that begins by considering what we want students to *learn*. And, we know our teaching is in the wrong place when students first and foremost believe their goal is to learn all about [insert technology].

This overemphasis on technology isn't just a problem that exists at the classroom level. Based on our experiences, countless schools and districts are heavily investing in devices, sometimes as if it's *the answer*. Then, to make sure money isn't wasted, teachers are required to use these tools, and technology walkthroughs are implemented on a wide scale.

While we fully appreciate schools and districts moving toward technology integration, it has become increasingly obvious to us that technology amplifies (for better or worse) what's already taking place. If we have a dynamic teacher and meaningful learning, technology can help to elevate these conditions. If we have a lackluster teacher and insignificant learning, not only will technology not help, but its entity could potentially mask what's truly transpiring.

In addition, technology can be defined as something that was invented in our lifetime. For most of our students, these technologies aren't a novelty but rather a way of life. We need to do what we can to ensure student access, but then we don't need to take the use of these tools and hold it up on a pedestal. Also, the majority of the time, our students know more about these tools than we do, but we don't ask them for help. As a result, our students miss out on valuable opportunities when we're hesitant to use technology because we haven't fully “mastered it.”

On a classroom, school, and district level, many of our technology-related problems (as well as other problems) dissipate when we prioritize pedagogy by integrating technology into meaningful teaching and learning, not the other way around. Or, as [Michael Fullan](#) succinctly puts it, “Pedagogy is the driver, technology is the accelerator.” (And in some instances, technology is the roadblock.)

For both of us, and for countless schools and districts, getting out of this “technology rut” is not easy, but we have found project based learning is oftentimes the answer. This approach can teach us valuable lessons that help us to move forward by realizing (and then fixing) the errors of our ways - errors that are acceptable as they're a necessary part of the growth process. A few of the countless lessons we've learned, which we'll explore throughout this book, include:

- When we plan our teaching based on what we want students to learn (not based on which technologies we want students to use), and we communicate these learning goals to students, both teachers and students can then more easily determine which technologies should be leveraged to elevate the learning.

- While we can always make technology recommendations, what's more powerful is students having voice and choice in which technologies they use - if they want to use technology at all.
- With or without technology, we assess and possibly grade students based on learning goals - not on their ability to follow directions.
- Even when technology takes a backseat during a project, we can still use tools such as websites (e.g., Google Sites, Blogger, WordPress.com, etc.), learning management systems (e.g., Canvas, Schoology, Google Classroom, etc.), and cloud computing (G Suite for Education) to extend the learning beyond school hours, while also keeping ourselves in the loop as to how students are progressing with their work.

When we're well-versed in project based learning, we come equipped with a safety net that helps to ensure intentional and defensible teaching practices when we decide to integrate technology. At the same time, if technology doesn't play a role in teaching and learning, we're still providing our students with experiences that meet their needs in a progressive way. Because, when technology becomes synonymous with "progressive," our thinking is misguided. Based on the choices we make: ***We can be traditional with the latest technologies, or we can be innovative with nothing at all.***

Background Information: This story was included in Chapter 2 to help to hammer home the point that we need to rethink the grading of projects. We decided to remove the story when we realized the works of Daniel Pink and Alfie Kohn are enough to get this point across. Though, we think the story will resonate with many readers.

Creativity Story

All students have creativity in them, and in each classroom (especially at the elementary level) there always seems to be a handful of students who proactively demonstrate this creativity more than others. Now, thinking back to when Ross was an elementary school student (circa 1992), he believes he was one of these students. He was constantly engineering his very own LEGO creations, oftentimes he spent hours obsessing over how to design the perfectly painted watercolor cover for his book report, and he even attended his own private art classes outside of school.

Fast forward to seventh grade, when his art teacher from Hillcrest Middle School, Mr. Bartimol, left a message on his mother's answering machine that went something like, "Mrs. Cooper, this is Mr. Bartimol. I'd like to speak with you when you have the chance." Of course, upon hearing this message, Ross naturally assumed he was in trouble. So, as his mother prepared to call back Mr. Bartimol, Ross readied himself for another tongue-lashing followed by another punishment.

As it turns out, the purpose of the initial phone call was for Mr. Bartimol to communicate to Ross' parents how talented he thought he was, and how he thought he had a future as an artist. (Ross breathed a sigh of relief.) The

fact that Ross still remembers this phone call speaks volumes about the positive calls we make as educators, when the default is to only call home when there is a problem. A two-minute phone call can change a student's life.

Fast forward to 1997 and Ross is a freshman at Trumbull High School, taking Ms. Monaco's art class with students from grades 9-12. Just like any other class, this class and its work were graded. And because Ross was in class with students from all grade levels, and because his artwork generally wasn't as good as other's, upperclassmen typically earned As and Bs while his work mostly earned him Cs. As a result of this discouragement, coupled with the damage to his grade point average (GPA), this was the last art class he ever took. Bottom line: ***If we throw a grade at creativity, we're going to squash it.***

Background Information: This section was included in Chapter 5, when discussing PBL culture and how to establish relationships with students. Although some valid points are made, we think the chapter already has enough to convey the message that students and relationships should be at the center of our work.

Invest in Students...As People

As an administrator who has led many instructional shifts, one of the mistakes Ross has made is almost always bringing up these shifts during conversations with teachers in his organization. Over time, what he has learned is: ***When we consistently harp on what could be, we're possibly insulting the hard work of others without even knowing it.*** Sometimes the first rule of an instructional shift is: You do not talk about the instructional shift. While the majority of us are willing to move forward, we also (1) want to feel as if our current work is valued, (2) don't want to feel like we're pawns in someone else's game, and (3) want to be treated as people, not just educators.

These three points also ring true for students. With all of the demands placed on us (some of which may be self-imposed or imaginary), it's easy to develop the attitude, "My students *must* learn!" When we hold this belief, it impacts our actions, sometimes without us being conscious of it. Our actions then negatively impact our students. In other words, by putting pressure on ourselves, we may also be inadvertently pressuring our students in ways that are counterproductive to their learning, their mental health, and more.

To reflect upon our own behavior, we can think about the percentage of our student interactions that focus on curriculum, and the percentage of interactions that deal with getting to know students on more of a personal level. Then we can intentionally work toward shifting some of these interactions from the former to the latter.

When we want students to make progress with their work, we're already investing in them as people (as long as our interest is genuine), and therefore they're more likely to be willing to collaborate with us as students.

Much like adults, students need to be seen, and students need to feel valued. If we treat students (and adults) as cogs in a wheel, we only have ourselves to blame when the wheel gets stuck in the mud.

Background Information: This section was included in Chapter 5, when discussing how to lay the foundation for project based learning before we have our students dive in. Based on our conversations, starting the school year early isn't feasible for the majority of teachers.

Start the School Year Early

Because Ross knew his teaching style was different, he worked to get his students comfortable as quickly as possible. (On one occasion he even had a parent say to him, "Your reputation is - your classroom is amazing, once we get through the first month.") So, about a week before school began, he invited students into the classroom for an optional five-hour class on digital storytelling. While this session helped him to proactively establish rapport with students, it also previewed for students the type of learner-centered projects they'd be experiencing throughout the year.

The crux of the activity involved Ross introducing to students these five stages of a story arc:

- **Setup** - Introduce the characters and story setting.
- **Conflict** - Create a problem for your main character.
- **Challenge** - Make the problem even more difficult.
- **Climax** - Help the main character solve the problem.
- **Resolution** - Show that the problem has been settled.

Students made connections between these stages and their favorite movies and television show episodes. Then, students, in small groups, storyboarded a five scene movie - one scene for each of the five stages. Next, students shot and edited their movies. Finally, everyone viewed and discussed each other's work.

What matters here is we're learning, having fun, and setting the tone for project based learning by getting students used to learner-centered experiences. Of course, an activity such as this one could be done at any point in time - not necessarily just before school begins.

While the day's focus was digital storytelling, what could have been even more invaluable were the informal conversations Ross had with students, as he was able to get to know them as children (not just students) even before everyone "had to be at school."

Background Information: This section was included in Chapter 7, which focuses on inquiry-based learning. While we do believe what's here is useful, all we're really doing is parroting someone else's work. Instead, we included the article, "[The Many Levels of Inquiry](#)" on the [Resources page](#) of our website.

Four Levels of Inquiry

In "The Many Levels of Inquiry" (2008), Heather Banchi and Randy Bell present four levels of inquiry. These four levels, which are also entry points into inquiry, work together to gradually release responsibility to students, starting with confirmation inquiry and ending with open inquiry.

1. **Confirmation Inquiry** - Students are given a question and a procedure to follow to confirm a conclusion that is known by everyone in advance. (We caution against using this approach unless absolutely necessary.)
2. **Structured Inquiry** - Students are given a question and a procedure to follow to come to a conclusion based on an explanation supported by evidence.
3. **Guided Inquiry** - Students are given a question and they follow their own procedures to come to a conclusion based on an explanation supported by evidence.
4. **Open Inquiry** - Students establish their own questions and follow their own procedures to come to a conclusion based on an explanation supported by evidence.

In this often-cited article, the four levels apply to activities (hands-on lessons), but we can also think about how these same levels can be applied to entire units. Keep in mind, once inquiry spans across an entire unit, we refer to the unit as project based learning. Meanwhile, others may refer to the unit as one of the four types of inquiry, inquiry-based units, curricular inquiries, or something else. But, no matter what we call it, common language is important as it helps us to avoid confusion while promoting collaboration.

Work With Us

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