

BEAT BOREDOM

**ENGAGING
TUNED-OUT
TEENAGERS**

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SEVETSON RUSH**
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AUTHENTIC TASKS: ENCOURAGE WORK THAT MATTERS OUTSIDE SCHOOL

During her senior year of high school, Samantha Kalsow wanted the Synergy Club to sponsor a “Bike to School Day.” The principal said no. There wasn’t a protected bike lane or continuous sidewalk, and the school didn’t want to support an activity that put students at risk (personal interview, October 10, 2016).

Samantha brainstormed with a friend who had been injured in a bike accident at a nearby intersection—he had jumped over a fence at a state highway—and they decided they wanted to tackle the bigger problem: the lack of safe bike trails in the community. But they weren’t sure where to start. I suggested they try the state legislature.

Over the following months, Samantha and her friend took on the legislative process. They e-mailed legislators, polled students and teachers, gathered

signatures on a petition, printed enlarged Google maps showing the dangerous intersection, teamed up with the American Red Cross, spent hours preparing and practicing speeches, and ultimately testified before Minnesota's House and Senate transportation committees on the "Safe Routes to School" bill.

In a hearing on the bill, they explained the problem, shared their maps and visual images, and told personal stories to make their point. "One of our friends also bikes to school fairly regularly, and she often has to lift her bike up over a guardrail, which also poses a safety concern," Samantha told the committee, pointing out the guardrail in a picture.

They impressed the committee, and they got their paved bike path (part of the community's sidewalk system). They also learned an incredible amount about the legislative process and personal efficacy.

"Every time I go past that sidewalk, I take a little bit of ownership of it," Samantha says. "That's my sidewalk. To actually have an influence on a piece of legislation and government being just a high school student was amazing."

Samantha was a serious student before the bike path project, but the opportunity to do real work that mattered to her was highly motivating, much more so than routine schoolwork. She estimates they spent fifty-plus hours on the project in their spare time senior year.

"It was something close to home," she explains. "Everybody knew that missing piece of sidewalk. We both had internal motivation because we wanted to bike to school. The fact that we couldn't . . . It was our own drive."

WHAT ARE AUTHENTIC TASKS?



Early Saturday afternoon on New Year's Eve day, seven students are huddled around a table at the local community center. Behind them, workers are decorating for a New Year's Eve party, but the students are focused on their laptop screens and the work ahead: how to reduce costs, set prices, improve marketing, and keep up production.

"The Christmas pouches didn't sell as well as the pencil bags," Nandini Avula tells the group (group interviews, December 31, 2016, and January 9, 2017). "If we could think of any ways to make the pencil bags more efficiently, that's one thing we could improve on. Do you think we need more zippers?"

"Yes, we need more white and black zippers," says Yoo-Jin Hwang.

“Can you order more?” Nandini says, looking to her left at Shelley Wang.

“Uh-huh.”

“And I was thinking of maybe setting quotas within departments. With production, do you think you guys could make four bags per week?” Nandini asks.

“Each?” answers Shriparna Patnayak.

“Yes, and if you can’t make the bags because you don’t have a sewing machine, maybe cut rectangles?”

Like Samantha, these students are immersed in their work. Running SaySew—producing and selling custom-made pencil pouches—isn’t just a school project for them. It’s a real business, and they have to worry about customers and inventory and price points and sales strategies. They have to decide whether to set up an Etsy site, and whether they can keep up with demand if they do. They can’t always take days off.

“You can’t just procrastinate and put it to the side,” Nandini says later. “You’re still going to get more orders, and you need to sell more. You have to keep track of everything; everything is like a domino effect. If we don’t have the product, we can’t take the pictures, and if we can’t take the pictures, we can’t do marketing.”

“And if we don’t have zippers, we can’t make the product,” Shriparna adds, laughing. “A class can only take you so far in learning about business and entrepreneurship. Here, you just learn as you go.”

What these students are doing—and what Samantha did—is an authentic task. Authentic tasks are real work, work that has meaning outside the four walls of school. Students doing authentic tasks might also be writing letters to the editor, conducting their own scientific research, writing music, producing newspapers or TV shows, creating educational films or PSAs, or producing apps.

I’ve used authentic tasks with my students since my first years teaching middle school English in Wichita. Because I had worked outside of academia as a journalist, I thought contact with the “real world” would be motivating to teenagers, who long to be seen as capable young adults. It was.

Authentic tasks are work with real-world implications, and they are so immersive that students lose track of time, forget about getting graded, and stop drawing a line between school and fun. Ask students why they work so hard when a task is authentic, and they say, “It matters,” “People are counting on me,” “We’re a family.”

Katrina Renacia, one of my *Viewer* newspaper editors in 2015–16, described it this way: “I had fun editing stories. The whole thing was just really fun for me; it was just a hobby. I worked on it everywhere; that’s why

I had Google Drive on my phone, so I could edit anywhere. I've definitely edited at the mall. That's why I had to convince my parents to get me an iPhone for data" (personal interview, January 4, 2017).

Authentic tasks are similar to project-based learning, which is growing in popularity in American schools, but they are not exactly the same. School projects are not necessarily meaningful in the outside world; students researching the Plague might prepare a poster diagramming the spread of the disease, but only for a classroom audience. Likewise, a task might be authentic without being a full-blown project. When my eighth graders wrote letters to the editor of the *Wichita Eagle* asking the city to build them a new skate park, or when my editor in chief Sisi Wei (personal interview, December 16, 2016) skipped her AP French test to make calls and find a new printing company for the *Viewer* (when the old one announced it was going out of business), those were not projects; the work was real. A business plan might be enough for a *project*, but launching the business makes it an *authentic task*.

Students like Samantha and Nandini often get involved in authentic tasks on their own, outside school or through extracurriculars. Some students at my school write video games or make movies on their own or work on political campaigns or start bakeries or create handmade jewelry. But not every student gets those opportunities, especially if their parents don't know how to work the system, or if they lack startup funds, home Internet access, or transportation, which can be true for many children in poverty and recent immigrants. Many students are so busy working minimum-wage jobs during the week that they wouldn't have time to think about starting their own enterprise or getting involved in legislative action. This is why we need to make these learning experiences part of a high school education.

When we do, we need to make sure we are giving students an authentic experience, not just a sandbox experience. That means we must give them the opportunity to speak their own minds and spread their wings, challenge perceived injustices and develop efficacy—and we have to give them the chance to fail. It's too easy for teachers to manufacture a make-believe political experience, where an elected official comes to class to talk with them, rather than having students initiate contact and possibly be ignored. (I advised my students never to tell anyone they were doing a "school project," and most followed that.) It's also too easy for teachers to create make-believe business experiences, where the teacher helps design a product or service, provides a captive audience for sales, and absorbs any losses—like a class car wash or bake sale.

Authentic tasks require students to put themselves out there, to take risks. They have to call the legislator's office or the potential customer's office.

They have to ask the difficult questions or make a good sales pitch. They have to resolve conflicts, sometimes with their own team members. This is scary for them, but it's also empowering.

For Katrina, it was a huge confidence booster. She moved to Minnesota from the Philippines as a sophomore, and though she already spoke English, she had a heavy accent. "People kept asking me to keep repeating the words I was saying. That was a confidence buzzkill," she says. But when she started interviewing students and teachers as a reporter for the *Viewer*, it boosted her confidence. "I could now talk to people without cringing or shaking."

Authentic tasks require students to stand on their own, but they still need support from teachers. Our role is to create a conducive environment, help students identify appropriate challenges, and provide them with knowledge, tips, and skills. We know how to identify the right legislators. We know how to present ourselves in an interview. We know how to talk to potential customers. We also have to try to keep well-intentioned adults (including ourselves) from interfering—as long as the students are following laws and school rules.

WHY USE AUTHENTIC TASKS?



When I was twenty-two, just out of college and working as a reporter for the *Wichita Eagle*, I had to call Bob Dole. That might not sound like a big deal, but this was not long before he ran for president, and he was a significant power broker in the US Senate. I was at work on a Saturday afternoon (July 8, 1989, to be exact), and Rep. Dan Glickman, a Kansas Democrat, had just announced he was refusing honoraria. I was supposed to get Sen. Dole's reaction.

My editor assured me: he never answers our calls.

So I called and left a message, and of course, Bob Dole called me back. Here's how the conversation went, more or less:

Me: Hello, this is Martha Severson at the Wichita Eagle.

Bob Dole: Martha? Bob Dole here.

(Ten seconds of silence. My heart racing.)

Me: Oh, yes, I called you—

Bob Dole: What about?

Me: Dan Glickman announced he's no longer going to take honoraria—

Bob Dole: So what?

That's what I remember. He was gruff and impatient, and I was nervous. I had never interviewed anyone famous or powerful at the national level before. I ended the call after a few more minutes feeling like a novice, but I had my reaction quote.

At some point, all of us have to learn how to be adults. Not only that, we have to learn to regard other adults as our peers, as people we can work with, rather than as people we are simply expected to obey. We have to realize that sometimes adults are wrong, that sometimes we need to question decisions and speak up for ourselves to effect change. That's a hard lesson, especially when high school students have been taught for so long just to follow the rules. I was still learning it at age twenty-two, when I made that phone call.

Anna Brockway learned this lesson at a much younger age, working on our student newspaper, the *Viewer* (personal interview, December 28, 2016). In November of her senior year, Anna was leaving school one day and saw police officers searching a car in the school parking lot. The next day, the school was abuzz with rumors about the search. A student's phone was searched. Free speech was infringed. A backpack was taken. Drugs were involved.

"I was a student, and normally I would have just been one of the students who maybe would have been affected in some way, maybe outraged over the phone [search]," she says. "Being on the *Viewer* put me in direct contact with the school administration and the police department and the DEA, which gave me more perspective about what was happening and allowed me in some ways to bridge the divide between those people and the way their duties affected the school community."

Anna interviewed school administrators, who wouldn't tell her much—and didn't particularly want to see the story in the student newspaper. She interviewed students, including some who had been drug buyers. She left school one day to drive to the local sheriff's office and obtain the incident report, which told the story in great detail. According to her published story, the report said the vehicle "contained suspected marijuana, suspected cocaine, suspected mushrooms, 9 pills of suspected Ecstasy, 1 digital scale, and \$265." She also interviewed a DEA agent, who called it "a pretty significant arrest" (Brockway 2007).

Anna wasn't just being a student journalist—she was working as a real journalist, doing all the work that journalists do. Not only that, she had to stand up to pressure not to run the story; she had to risk offending school authorities who had power over her. She learned how to ask difficult questions, how to respectfully challenge authority, and how to manage the stress of it all. I supported her and gave her suggestions, like where to get the police report, but I let her take the lead. She talked to the administrators and the DEA on her own. It was seriously empowering. “I felt like I was kind of being the voice of the students,” she says. (See Anna's story, Chapter 8, Sample 1, in the appendix.)

The next time Anna found herself in a similar position, writing an article that upset authorities on her college campus, she knew how to deal with the fallout. She was prepared to stand up for herself, and she stayed poised. “I think the only reason I could do that was because of my experiences in the *Viewer* and having some practice dealing with the administration there,” she says. “*Viewer* was really the first place I had to express your opinion and get involved in the community in a way that was actually productive.”

What Anna was doing when she reported on the drug bust was far from contrived. Instead, it involved what Daniel Pink (2012), who has written extensively about motivation, calls the three keys: autonomy, mastery, and purpose. She was doing work that was deeply important to her, and she developed excellent reporting and writing skills in the process.

Building this kind of confidence and assertiveness is one key reason for engaging students in authentic tasks, but it's not the only reason. Authentic tasks are important because they are deeply engaging and motivating to students. They give many students a reason to care about school and a taste of what they can do after high school. They can also be used to teach valuable academic content and skills as well as leadership, collaboration, creativity, and job skills—some of the critical 21st century skills.

When Josh Jones was a freshman in my economics class, he wasn't particularly motivated (personal interview, January 9, 2017). He was up out of his seat all the time, constantly in motion, constantly distracting everyone. If he wasn't in motion, he was asleep. He was a friendly kid, but he drove me crazy—and he knows this.

“I don't know why I wasn't interested in school—maybe because it was overwhelming to me; I didn't know how to accomplish tasks in a timely manner,” he says. “I think that changed when I was given things that I wanted to do.” Junior year, Josh quit playing sports, which he hadn't really liked anyway, and joined the *Viewer* and theater. He started taking classes such as

humanities and philosophy, which helped him think about life and develop a sense of purpose. And he fell in love with the art of page design.

Senior year Josh worked out a schedule where he could spend three hours a day in the newspaper office, perfecting pages in Adobe InDesign, choosing the right fonts, resizing photos, figuring out how to play each story. “Given, I wasn’t working all of those three hours,” he says. “But it made it easy to work. If I had an idea, I could work on it. If I had something big, I could work on it the whole time.”

By the time he graduated from high school, Josh was transformed. He was passionate and focused; his energy was funneled into his work, not frittered around the room. He wanted to talk about design ideas, wanted to meet leaders in the field (I helped him attend a professional workshop with design guru Tim Harrower), and he wanted to do well in his other classes to prepare himself for college.

Josh said it wasn’t necessarily the news that drove him, or even the sense of a real audience reading his work, but the knowledge that other people on staff were counting on him, that what he did was vital. “People are depending on you—you want this to succeed and so do they,” he said. “We really wanted to make it good. People need something that feels special to them; this is mine.”

Two years out of college, Josh is a designer at the Minneapolis *Star-Tribune*, and he’s frequently in charge of designing the Sunday front page for half a million subscribers. He still funnels all of his energy into his work, and he meets serious deadlines, and he loves it.

Not everyone is going to find their calling in high school, but through authentic tasks, every student can experience a real-world challenge and develop a sense of efficacy. For fifteen years, I required every student in Civil Liberties (and later, the required US Government class) to work in a group on a public policy project. This involved researching a current issue—global, national, state, or local—and involving themselves in the public discourse in some way, much like Samantha did. Some students advocated for or against building new stadiums (for the Twins, Vikings, and University of Minnesota Gophers), by writing letters or marching at a local intersection with protest signs. One group attended a human trafficking seminar, then signed a petition and wrote a letter to Senator Al Franken. One group went to the school board, asking the district to add more AP classes for students. Others involved themselves in issues like same-sex marriage, bullying, the war in Iraq, and school lunch policies. The students had to decide what issue they were interested in, figure out who was in charge of making decisions, and find a way to influence the process. (See another example of student work from a public policy

project in Appendix B, Chapter 8, Sample 2, available online at sten.pub/beatboredom.)

Zach Roozen’s passion was sleep—or lack of it. He was a runner in high school, so much of the year he was in the community pool at 6:00 a.m. for an “aqua jog” before driving to school. He had scheduled a first-hour study hall, assuming that would help him get some rest, but he quickly learned that sleep was forbidden in study hall. So was skipping. Overtired and trapped in a silent, controlled classroom, he got angry (personal interview, January 6, 2017).

“I’d wake up at 5:30 and I didn’t have a class until second period [at 8:30], and I had to be there. . . . We had to be silent, that was one of the rules. Class would start, and the kids were, like, coloring in coloring books, and I was like, ‘What are you doing?’” he says. “It wasn’t what I thought a free hour should be. I remember thinking extra sleep in the morning or being able to consume the time the way I wanted was way more important.” Zach worked with a friend to circulate a petition; then they wrote to all the school board members, asking them to let students take a first-hour study hall “off campus.” Although he didn’t get immediate results, he felt like people listened to him, and that was empowering. He realized he could be a leader, and he could advocate for himself.

In college, this experience shaped him in two ways—it led him to write a major paper on “form versus substance” in education, and it empowered him to challenge campus administrators on policies he found absurd. For example, students in his program at the University of Southern California are training to be actors, but they are forbidden to miss class for acting jobs. “We get in these heated battles,” he says. “What I learned in the project we did is that a problem is like an onion. You’ve got all the different layers. Now I have an approach that I know can work, through trial and error. Something like this project allows us to figure out the framework for that.”

Zach graduated high school in 2012, not knowing what impact his efforts would have on our school. The very next year, study hall disappeared, and students were given permission to spend free hours in the library, which has since transformed into an open, collaborative work space with a coffee shop and a makerspace. Now, the school board is also planning to push back start times to help teenagers meet their need for sleep. Zach wasn’t the cause of these changes, but his voice (and other students’ voices) helped.

Sometimes, authentic tasks require an unusual degree of student leadership. Earlier I mentioned Sisi, who skipped an AP test to find a new printer for the *Viewer*. I didn’t even find out she missed that test until several years later (and I wouldn’t have wanted her to)—she had just assumed finding a

printer was her responsibility. Looking back, she said she loved being treated like an adult. “As editor in chief, I look back at the things I was able to do and take responsibility for, and I’m blown away: creating an entire editorial calendar, proofing twelve pages biweekly, discussing orders with professional printers, speaking in front of reporters, enforcing deadlines. . . . I absolutely loved it,” she says.

Another editor in chief, Christina Xia, found herself with even greater responsibilities—dealing with lawyers and the professional media when her group of student editors faced a prior review battle (personal interview, December 29, 2016). In Christina’s senior year, our school principal objected to a story that mentioned disciplinary action against several students and tried to block distribution of the paper, but the reporter got parent permission to use the students’ names, so the principal backed down. After the story came out, the principal announced that she planned to review all future issues before they went to press. Christina found herself fighting for student press freedom and ended up in a limelight she had never sought. “I think I was mostly stressed out,” she says. “It was something I felt, like, as an eighteen-year-old, you really don’t know what to do.”

In that situation, my ability to help the editors was curtailed. Students have free speech rights, but teachers don’t have the same rights, so colleagues from other schools cautioned me that I had to stay out of the legal fray or risk my job. I had no good option but to let the students make their own decisions. They had meetings in the classroom when I was at lunch, and they met with a lawyer outside of school. The superintendent called them into a private meeting with him, which made them all nervous. Under Christina’s leadership, the students decided not to submit to prior review—they didn’t print a paper for six weeks, basically going on strike. In the end, after a lengthy negotiation, the district agreed to a new policy without prior review.

Dealing with unhappy administrators, some negative local press coverage, and an actual legal case was not anything Christina had expected—she was an incredibly positive, nice people pleaser, not at all rebellious by nature, but she says now it was a powerful learning experience. “I think it made me realize that there are places and things that you need to stand up for, even if you are completely not comfortable with what is happening and feel like you’re helpless,” she says. “You can’t just have people with authority—when you’re right, especially—you can’t just let them trample over you. It doesn’t matter if you’re not an adult or if you’re a student.”

What academic skills and content can students learn from authentic tasks? Clearly, they can learn reporting, writing, design, and editing. They can learn persuasive writing by writing letters to officials, editorials, and advertising

material. They can also learn research—how to extract relevant factual information and data from nonfiction sources—and presentation skills from tasks like the public policy project.

The students involved in SaySew, the student-run business, have also learned how to do market research and analyze customer data. They have learned how to manage a budget, shop around for low-cost resources, hire employees, plan meetings, create an online store, manage a business bank account, and write up an annual report. In their several years of involvement in running Junior Achievement companies, they have also learned how to cope with frustration when communication breaks down, when team members don't pull their weight, and when there are conflicts about the direction of the company. Several of the students, including Nandini and Shelley, were involved in an earlier company that succeeded in JA competitions but fell apart behind the scenes when students just couldn't resolve disagreements over who owned intellectual property. The company disbanded, with several of the participants no longer speaking to each other.

"I think there was a lot of miscommunication and misunderstanding," Shelley says.

"And a lack of trust among members," Nandini adds. "I think trust is really important if you're trying to work together."

The next time around, with SaySew, Shelley says, "We knew what to avoid." They built their next company with a heavy emphasis on collaboration, communication, and working together on every task. "This weekend I made my first sale, even though I'm not in marketing," Shelley adds.

Authentic tasks are also a powerful way to teach science and technology. With support from teachers, students can develop their own scientific questions and conduct real research, which can be presented at conferences or competitions and published in journals. Mike Lampert, the Salem, Oregon, physics teacher, works with his Honors Research students to develop projects for multiple science and engineering fairs. His students love the chance to do real research on subjects that interest them.

Eleanor Fadely, one of Lampert's students, took the class twice and worked on several team research projects for the Toshiba Exploravision (<http://www.exploravision.org/>) competition, which requires students to create a hypothetical invention using future technology (personal interview, December 23, 2016). Her team decided to work on medical technology, which required learning a lot on their own about current medical technology.

"We were interested in doing something that would help people with pacemakers not have to have surgery so often to replace the batteries, a quantum bioengine," she says. "It would use temperature differentials in your body to

create an electrical current that would power the pacemaker/defibrillator.” The team had to create a prototype of their product, as well as a website and informational video. They spent all of spring break at school working on it. “One night, we stayed at school until one in the morning working on this project,” she says.

Another year, Eleanor’s group researched how to make concrete more environmentally friendly by having it reflect or absorb sunlight, depending on the season. Not surprisingly, she is now a science major at Carleton College, and she recently completed field research on landmass in Greenland. She said getting the chance to do real science in high school is what set her on this career path. “If you’re going to be a scientist in the real world, problems don’t appear as just formulas you have to solve on the page,” Eleanor says. “They appear in real-life contexts, and you have to break them down into manageable parts.”

Another benefit of authentic tasks is that they foster creativity and divergent thinking, skills that are often lost when we overemphasize right answers and facts that can be memorized for multiple-choice tests. One of my student-run businesses tried to develop a school-bus tracking app; another tried to sell 3-D printed items, like Valentine’s hearts. Neither one worked at the time, and that was OK. They were good ideas, and they forced the students to try something, talk to people, develop a prototype, practice divergent thinking. The majority of entrepreneurial ventures don’t work out—and that’s part of the lesson.

In AP Psychology, my students do several authentic tasks during the year. During first semester, they are required to produce a children’s book—either on paper or online—or a video to teach a psychology concept to a younger child. For example, they can produce an interactive book to teach preschoolers about the five senses or a more involved story (think Magic School Bus) to introduce middle school students to the brain or nervous system. The students take the work of communicating their knowledge to younger students very seriously, and their products are thoughtful and creative.

Daniel Yong and Gabriel Lee decided to produce a “Write My Life” video tour of a Brain Museum (group interview, January 17, 2016). In the video, called *My Brain Adventure*, two hosts named Corpus and Callosum walk the viewer through various parts of the brain and their functions. The first stop is the brain stem, where Daniel and Gabriel, as the narrators, offer a playful introduction, while drawing simple pictures on a whiteboard. (The video is available at <https://www.youtube.com/watch?v=e4EO0TUF41A>.)

“What do you think the brain stem does?”

“Brain stem? Is that like, where the brain grows, how plants do from a plant stem?”

“You have the right idea. The brain stem is sort of where your brain grows from the spine. It controls your automatic survival functions—”

“Really? What kind of survival functions? Like how to make fire and build shelter?”

“Not that kind of survival!”

The video is accurate, funny, and engaging. It’s as good as anything produced by Crash Course, and I’ve shared it with my students and passed it on for other teachers to use. Daniel and Gabriel said they spent about six and a half hours on the project, from 7:30 p.m. to 2:00 a.m. one night. They wanted to make it really good, and they loved the creative process, as well as knowing they were making something for an audience. “It takes time to be able to come up with a project idea and actually finish it,” says Daniel. “When I’m having fun with a project, I tend to lose track of time. As a result, the hours just go by.”

AP Psych students also conduct limited-scale experiments, where they do a review of the literature, propose a hypothesis, conduct tests with an experimental and control group, and present the results. One group decided to investigate whether third graders are more likely to believe someone wearing a lab coat than to believe someone dressed in casual clothing. They worked with a local elementary school and went out to teach a science lesson on clouds. They intentionally told the children false information, including that clouds are made of cotton balls. The results: they found out the kids believed whatever they were told, no matter how the “teacher” was dressed and no matter how ridiculous the information. They later debriefed the teacher and the participating children—sharing what they have learned is also part of the assignment.

HOW DO YOU INCLUDE AUTHENTIC TASKS IN YOUR INSTRUCTION?



“What are we doing? Why do we need to learn this?”

High school students demand relevance—they check out if they don’t see the point of what they’re learning—and there’s no better way to provide it than by giving them authentic tasks.

The first step in designing an authentic task is very much like Grant Wiggins’s (2009) backward design process. We need to consider the goal:

What do I want students to know? What do I want them to be able to do? Then add: Why is this important for them to know?

If there's real-world applicability, then there's probably an authentic task in there somewhere.

Why do we want students to learn how to write well? I can think of many reasons beyond the college essay and academic writing. They'll need to write in many jobs, whether they are supervisors writing employee reviews and staff manuals, contractors writing bids, lawyers writing briefs, marketers writing surveys, real estate agents writing home descriptions, and so on. They'll also need to write in order to engage in public life—letters to their representatives, letters to the editor; even compelling social media posts or blogs require writing skill. And of course, they'll need to be able to write if they want their complaints to be taken seriously. I spent hours once writing a letter to the Kansas State Insurance Commissioner—a letter that ultimately got me a sizable payout from an unhelpful insurance company. Skilled writers definitely have advantages in the real world.

Wiggins wrote an entertaining piece in the *English Journal* in 2009, using results from an informal survey of friends about the kinds of writing they did at work. They listed marketing plans, memos, case histories, blogs, user manuals, legal briefs, and funding proposals. All of these could be used as authentic tasks in writing classes.

We could do the same exercise with math, science, history, economics, or public speaking—or almost any high school subject. The public policy project grew out of this thought process. The primary reason for teaching government or civics at all is to empower our students to become active, engaged citizens. If it's important for adult citizens to know how to gather information on an issue, circulate a legally acceptable petition, contact a representative, speak at a public meeting, or even run for office, then it's important for high school students to learn those skills—by using them. Far more important than memorizing facts about the structure of government.

There are a number of different ways to incorporate authentic tasks into our schools. One is to use specific projects, like the public policy project, the children's books, or student-designed experiments. These tasks aren't necessarily the everyday work of a class, but they give students an opportunity to apply what they're learning in a real-world context at various points in a class. Students typically have some class time to initiate these projects, then collaborate with classmates outside of school.

Friberg and Nippert (personal interviews, September 14, 2016) assign their biology students an authentic task related to wolf and moose populations on Isle Royale in Lake Superior. The students read a *National Geo-*

graphic article, watch a video about the ecosystem produced by scientists at Michigan Tech, and conduct a data analysis on the wolf and moose populations. They find that the population of wolves dropped from twenty-four in 2009 to just nine by February 2014, an alarming decline. Finally, they decide how they think scientists should manage the population—for example, *should humans introduce new wolves onto the island?*—and write letters to the research scientists at Michigan Tech.

Some students favor introducing new wolves:

Dear Mr. Vucetich and Mr. Peterson,

The addition of new wolves to the Isle Royale wolves is vital to the survival of the wolves, and the island. Inbreeding depression has taken hold of these wolves by the throat, and only we can help. Adding new genes to the already existing wolves will help lessen inbreeding depression and increase a healthy wolf population once again.

Others are firmly opposed:

Dear Mr. Vucetich and Mr. Peterson,

I believe that humans should not introduce new wolves onto the island at all. If you did not put land wolves on the island, the island wolves will probably die out if an ice bridge is not formed. The moose population would then grow until a new predator came.

“[Students] like it because they get to express their judgment on a situation after having a debate and analyzing the biology,” Friberg says. “Knowing their thoughts and opinions will be read by someone else makes them want to put their best foot forward.”

Another way to incorporate authentic tasks is to make a task, or project, the entire focus of a course. Lampert’s Honors Research course is one example. Similarly, producing the *Viewer* is a course at my school, called Newspaper Production. Every day during fourth hour, students work on producing their

own twelve-page newspaper, from developing story ideas to editing, copy-editing, writing headlines, taking photos, soliciting ads, creating graphics, designing pages, and sending the finished product to print.

The teacher's job—my job until this year, when I handed it off to English teacher David Ostrom—is to provide guidance (especially on tough legal or ethical issues), answer questions, manage the budget, and suggest edits to stories, while leaving most of the actual editing and production to kids. Once every two weeks or so, when the issue is about to go to print, students stay late after school for print night. Watching them work isn't so different from watching professional journalists work; there's a lot of joking and camaraderie mixed in with serious questions.

On one print night in January, students are wandering in and out of the room, shouting out questions, teasing Ostrom, occasionally crowding around one computer to discuss a thorny problem. The sun is down, but they're in no hurry to leave (classroom observation, January 17, 2017).

Daniel Yong looks up from his computer, where he is making a month-by-month time line of the crisis in Aleppo and asks, "Why is September such a long month?"

Amber Zhao answers, "You can use an abbreviation."

Daniel says, "I don't want to do that, though. It ruins the continuity."

Amber laughs. "Are you crying? Don't cry."

Daniel starts laughing in response. "I hate the month of September." A little later, he adds, "I hate November."

Then Amber, who is the managing editor, becomes engrossed in a debate over how to write a headline for pro/con editorials on teacher tenure.

"Why don't you just say, 'Is tenure beneficial? Is tenure a societal benefit?'" Amber suggests. "Then you could say on the left half, 'Tenure protects teachers' jobs' and on the right half you could say—"

"Threatens students?" Kailey Newcome, the editor in chief, suggests.

"Compromises—well, you know what I mean," Amber says.

"I kind of like 'Use' and 'Misuse,'" Ben Davis, the editorials editor, says.

"I don't really like this 'Yes and No' thing," Amber says.

They settle on a large headline: "Is Tenure Beneficial?" with two sub-heads: "Yes, It Secures Teachers' Jobs" and "No, It Leads to Misuse." They care about making the right word choices—they know other people will read their work, so it matters.

At some schools, journalism isn't just a one-hour-a-day class, but a massive program offering opportunities for hundreds of students. Aaron Manfull is one of two full-time journalism teachers at Francis Howell North High School in St. Charles, Missouri, and he oversees two student websites,

social media, the newspaper, the photography staff, and the video program (personal interview, June 16, 2016). “I consider myself kind of in a coach position, where I’m there guiding them and working with them to practice stuff, and they’re going out and playing the game,” he says.

Other schools offer courses in entrepreneurship, culinary skills (that involve actual catering), and app development, which provide time for students to work on authentic projects during the school day.

Authentic tasks can also be implemented as extracurricular activities. I have about thirty students each year creating their own businesses (including SaySew) through the Junior Achievement Company Program (<https://www.juniorachievement.org>), which also provides mentoring by local entrepreneurs and the chance to participate in trade shows and presentation competitions (at local and national levels). The mentor and I meet with them once a week after school in the fall, then once or twice a month until we get close to the spring competitions. During the meetings, we brainstorm ideas, talk about leadership and communication, practice pitching ideas, and troubleshoot. Once the students have developed an idea, gotten product approval from JA, and set up their bank accounts, they run with their ideas on their own. (See SaySew’s business report in Appendix B, Chapter 8, Sample 3, available online at sten.pub/beatboredom.)

Although it’s not a class, Nandini said running a JA Company helps her draw meaning from her other classes. “It’s a really good way to integrate all my subjects into one activity—design, math, how people work, and the psychology of marketing,” she said. (See Figures 8.1, 8.2, and 8.3.)

WHAT ARE THE CHALLENGES OF USING AUTHENTIC TASKS?



Giving students this kind of autonomy is difficult, not because the students can’t shoulder the responsibility—but because *we think they can’t*. And that lack of confidence goes well beyond teachers. I can’t tell you how many times I’ve gotten phone calls from someone in central administration that started out with “Your student called me . . .” and ended with a well-intentioned adult asking me to intercede. Some adults don’t trust students with information, so they would prefer the students not ask questions. I’ve actually had school board members e-mail me to ask me not to let students working on public policy projects contact them because they were getting too many phone calls! That makes for an interesting, real-life lesson in citizenship. When my JA group wanted to develop the bus-tracking app, they hoped

to sell it to our school district. Rather than just tell them no, a district administrator called me to ask the students to stop asking. It's frustrating. When student journalists ask questions that adults don't want to answer, once again they often ask the adviser to intervene.

Figure 8.1

Amy Helgeson, Sam Lerdahl, David Zheng, Jeman Park, and Jacob Weightman, representing Rhidian Tech, introduce themselves to the judges before their team presentation at Junior Achievement's 2016 National Student Leadership Summit.



What's worked for me (and reduced this problem, if not eliminated it completely) is to develop relationships with these individuals—central district administrators, school board members, the principal—so that usually they trust me to give the students an appropriate level of guidance. I've attended school board meetings and worked to promote positive publicity in local media around these projects, so that school administrators end up “owning” the projects and feeling proud of them, rather than irritated. Quality work also matters. It's harder (though not impossible) for administrators to censor a newspaper that's won state and national recognition, so, for example, being named finalists for the National Scholastic Press Association's Pacemaker Awards—twice—also helped.

Figure 8.2

Shelley Wang and Maddie Wang, representing Leozarb, watch as other student companies make their presentations to judges at Junior Achievement's 2016 National Student Leadership Summit.



Figure 8.3

Sam Lerdahl, Jacob Weightman, David Zheng, and Jeman Park show Senator Al Franken their Rhidian Tech scheduling app during the trade show segment of Junior Achievement's 2016 National Student Leadership Summit.

It's also important to teach students to manage conflicts and controversies in a productive way, like Anna Brockway pointed out. When my students wanted to write editorials challenging school policy, I helped them figure out how to advocate for their opinion without demeaning those who disagree or making ad hominem attacks. Focus on the goal—for example, bathroom access for transgender students—rather than on the people who might disagree, or even people who might have given them opaque answers.

The biggest challenge, of course, is when authentic tasks lead to real-world conflicts, like the prior review battle or the dissent that fractured one of my JA Companies. I'll be honest—I didn't enjoy either of those experiences; I get stressed out by conflict. But I don't want my students to become conflict avoiders or passive citizens. I want them to be assertive and confident; I want them to be leaders in our society. (I have a Far Side cartoon outside my door, with a flock of sheep listening to another sheep telling them, "Wait! Wait! Listen to me! . . . We don't HAVE to be just sheep!") If that's my philosophy, figuring out how to guide students through icky situations is part of the deal. And every year, I learn ways to do it better. This year, JA students have agreed to a bylaw that no individual owns intellectual property rights to their ideas, which should alleviate that issue, at least.

Even if we trust our students to handle this responsibility, we might wonder whether they are capable. Can students actually write publishable stories? Can they actually run businesses or conduct viable research, if we don't do it for them? I believe they can. Not every story is publishable, but many are, and students learn to edit and help each other improve their writing. (Students are actually really good at identifying when other kids plagiarize, too.) Not every page will look professional, but students like Josh Jones will discover their niche and polish the final product. Sadly, some of my graduates who have gone on to work at their college newspapers have found that other high school journalists had their page design done by advisers. What kind of message does that send?

Not every business will succeed, and not every student will complete their research endeavor either, but most students do rise to the occasion when we trust them to do real work.

Another challenge is identifying authentic tasks that fit the prescribed curriculum. In some cases, like teaching writing, science, government, and business, this is relatively straightforward. In math, it might be more challenging, since much of high school math involves building abstract concepts for higher levels of math. Still, there is so much real work to be done with math, especially with the core concepts we want students to understand, like developing number sense, understanding functions, and using equations. Stu-

dents can use math skills to analyze school or state budget data and make recommendations about how the money could be better allocated. They can analyze crime patterns or traffic statistics or bus routes and, again, voice their opinions on the results to local authorities. They can conduct surveys on important community issues—such as, should the community provide open gym space for children after school?—and use statistical analysis to present the data to governing bodies. Computer science—creating apps and websites—is also full of opportunities for authentic tasks.

Another challenge is finding the resources—time, energy, and money. Students' engagement in authentic tasks can be so intense that they want to work all the time, and we just can't do that. It's not realistic to expect every teacher to work until 1:00 a.m. with students on a research project, and it can be exhausting when students keep tweaking the wording of an editorial at 7:00 p.m. on Monday, when you're just ready to send the paper to the printer and go home.

When students are working on authentic tasks, it's key that we learn to delegate. Teachers need to offer support and guidance, but we need to let go of being involved in every step. I trained my student editors to do the editing—and that's why Katrina was editing stories on her phone at the mall, and why Sisi found us a new printer without involving me. I also train student business leaders to be leaders; I expect them to communicate with each other and hold meetings outside of our regular meetings. I expect them to shoulder most of the work, which makes it manageable for me.

Financial resources are another issue; not everyone can afford a state-of-the-art classroom or even a small computer lab, like our *Viewer* newspaper office, with its eight slow desktop computers, four laptops, and five Chromebooks. The answer to that is finding grant funding, which takes effort. I've gone to local sponsor groups multiple times to get funding for new computers, new software, new cameras. When I started in 1999, I had four computers and an old copy of Pagemaker, and the computers were crowded in the back of my classroom (behind thirty-six traditional desks). Mike Lampert said he's probably raised a half million dollars in outside grant funding to provide his students with all of the resources they need. Almost no teacher has the money they need, but it's out there. Some authentic tasks, like the public policy project, require nothing more than access to computers in a lab or library.

A final barrier to using authentic tasks is the fear that they won't teach the kinds of content tested on state-mandated tests or college entrance exams. Setting aside the issue of whether those are the best measures of student learning, research has shown that students whose teachers embrace authen-

tic instruction do perform better, even on multiple-choice content tests. The lack of lecture and repetition is more than made up for by the students' deep engagement in their tasks. The key is for us to guide students toward appropriate, challenging tasks that require students to learn what we want them to know.

TIPS FOR TEACHERS

How do I get started if I have never used authentic tasks?

- Start with backward design. What do I want students to know? What do I want them to be able to do? Why is this important for them to know? Think about how the concepts and skills in your curriculum relate to civic participation, understanding of world affairs, consumer competency, or job skills, and develop a task that requires students to do real-world work.
- Start simple, with a moderate task like writing letters to the editor (or to researchers in a particular field) or conducting a survey on a local government issue.
- Set clear parameters, then give students the freedom to do work they care about. Be clear about what is acceptable—for example, I let the student journalists editorialize in favor of marijuana legalization, but not in favor of illegal marijuana use. I wouldn't let them start a business that might put other students at risk, like a Craigslist-style app.
- Give students examples of the kinds of work other students are doing. Many school newspapers, businesses, and research competitions have websites that can serve as exemplars.

How can I build on my use of authentic tasks to encourage better participation and deeper learning?

- As you grow more confident in helping students develop their own authentic tasks, the key is to listen and trust them. I frequently find my internal voice saying, "That's a terrible idea" when JA students propose a new venture, but I don't say that out loud. Who am I to quash their creative ideas? (I probably would have told Apple never to make iPhones—that's how good my business sense is.) The same can be applied to scientific research, public policy projects, and newspaper stories. Let students pursue their own ideas, and they'll be much more deeply invested, even if they turn out to be wrong.
- Encourage larger-scale projects, even semesterlong projects, new extracurricular clubs, or new courses. Show your administrators what other schools are doing, and let them see the kinds of student engagement, positive publicity, and good outcomes they generate.

- Focus on getting disadvantaged students involved. That's the benefit of incorporating authentic tasks in the classroom setting; then they are not reserved for students who have time to pursue extracurriculars or independent projects.

How will I assess and know if it's effective?

- Develop rubrics for assessing student work on assignments like the public policy project or independent research, where every student group will produce different final products. Using checkpoints or project steps is helpful. On the public policy project, my students were required to turn in four steps: (1) A description of the problem, including evidence of the problem and potential causes; (2) a list of alternative policy choices, including their favored solution; (3) an action plan for civic involvement; and (4) a presentation that included a report on their personal action steps.
- Use contracts to set clear expectations when students are working in a group production setting. My news editors agreed to contracts outlining the expectations for their jobs at the beginning of each year, and they turned in self-assessments of how well they were performing their duties before I evaluated each issue. This minimized conflict over issues like deadlines and editing expectations.
- Use the same assessments of course objectives. If you are using an authentic task to teach the scientific process or writing skills, students can still be expected to show their knowledge on conventional assessments.