Getting prepared for grown-up life entails more than following orders for sixteen years in school. Kids need to make choices, take initiative, and shoulder responsibility long before graduation day. We need to build in time for kids to choose what they want to investigate and learn in school so they will be better equipped to choose what they want to do when they get out of school.

Finding Time for Inquiry

For many schools and teachers, their first two reactions to inquiry learning are "I love this!" and "But we don't have time!" There's no doubt that our school schedules are always full, because we are busy "covering" the curriculum, right? And now, with all the standards and tests bearing down upon us, it doesn't seem like there is a single, crack, seam, corner, or split-second in the day when we could undertake these engaging, but time-consuming projects. Yet if we take a closer look (and a deep breath) we may discover some entry points for inquiry, allowing us to start small and then grow the time allocations as kids prove to us that inquiry works.

Many schools and teachers understandably find it hard to shift toward inquiry after decades of conventional instruction. So it is important for us to have many different points of entry that might work for different situations. In the chart that follows, we share eleven ways that schools have found the time (and the structures) to build inquiry into their day, week, and year.

11 Ways to Find Time for Inquiry

1. Recapture Science and Social Studies Time

SITUATION: In some elementary schools, where concern about reading scores trumps everything, the classroom time previously allocated to science and social studies has been squeezed out of the daily schedule in hopes of providing ever more reading practice. But wait a minute! How do kids learn about science and social studies? By reading, viewing, listening, writing, and researching.

ACTION: Coordinate the topics and texts between reading and their other subjects so kids can have coherent and interesting topic studies across the whole day, including pursuing inquiry subtopics during science and social studies periods. Incorporate Researcher's Workshop into your daily schedule and structure. Researcher's Workshop is an inquiry-based workshop model that alternates between science and social studies every few weeks. For a few weeks, teach a curricular science unit in the workshop where students read, write, talk about, and do science using the inquiry circle format. After completing the science unit, switch to a social studies topic and repeat the same structure. This is a powerful way to get more reading, writing, and thinking into the content areas, and we end up with four daily workshops: reading, writing, math, and researcher's workshop.

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lesson
LINK
See Lesson 28, "Install a Wonder Wall/Question Board" p. 179.

2. Establish a Wonder Wall and Set a Time to Use It

SITUATION: You know how kids always come up with those amazing but off-task questions like "Mrs. Harvey, if you sneeze too hard, will your brains come out?" Many times we'd love to stop the school train and delve into these topics and honor the kids' curiosity right away but feel compelled to press on with the curriculum.

ACTION: Make and post a Wonder Wall or Question List, where kids can post their inquiry questions (either by writing directly on the poster or by affixing Post-it notes) as they come to mind. This means kids can bring questions from home or write their wonders as they pop up during the day. When a student asks one of those "interrupting" questions, you can say, "Please go and post that on the Wonder Wall so we will remember to come back to it later." Then establish a time (the last ten minutes of every day, Thursdays at 11:15) address Wonder Wall questions. Be ready for kids to demand more time (see the lesson "Install a Wonder Wall/ Question Board" on page 179).

3. Build in Five to Ten Minutes a Day for Wonder Boxes

SITUATION: In the ongoing effort to infuse the day with curiosity and wonder, we share Wonder Boxes with our elementary age kids. In Chapter 8, we show how we model with our own research notebooks (sometimes called Wonder Books) and bring one in for each student to keep track of their inquiries. Wonder Boxes are another option, especially for younger kids, to keep track of their questions and curiosities. Our friend and colleague Debbie Miller came up with Wonder Boxes while engaging first graders in inquiry-based learning.

ACTION: Bring in a small plastic recipe box with note cards behind file tabs. Put these recipe boxes on the supply list at the beginning of the year and collect them over the first month of school. After kids have brought them in, introduce them to the class. (Have extras available for those kids who are not able to bring one.) Create and model a list of topics that interest you and write them on the tabs: butterflies, hiking, Halloween, for example. Then model some questions you have, writing or drawing one on a note card and filing it behind the related tab. On the day you introduce them, ask kids to come up with at least three topics that interest them and at least one question they have about that topic to jot on the note card. You model how you research your question and add more info on the note card, both through drawing and writing. And kids do the same. Primary children love these Wonder Boxes!

4. Implement Genius Hour or 20 Percent Time in the Classroom

SITUATION: When your school schedule is packed with activities, establishing a school version of the Genius Hour can open up (and protect) some time for inquiry. Daniel Pink, author of *Drive: The Surprising Truth About What Motivates Us* (2011) writes that "The secret to high performance and satisfaction—at work, at school and at home—is the deeply human need to direct our own lives, to learn and create new things and to do better by ourselves and our world."

ACTION: Schedule and set aside one hour (or other fixed period) each week for kids to investigate their own questions or pursue their own interests. (Some teachers even set aside a half hour to an hour a day to build in more time.) Encourage students to pursue their own passions and questions, study something of interest to them, and learn something new, either by themselves or with some buddies. Leave a few minutes for quick sharing at the end so that kids can hear one another's hot topics and burning questions. Many teachers we know who have launched Genius Hour in their classrooms report that kids love it so much, they find themselves building in more time than an hour a week. Twitter is a hotbed for info on Genius Hour, #geniushour. Also check out *Pure Genius* by Don Wettrick (2014).

5. Take In-School Field Trips

SITUATION: Changing instruction in big middle and high schools is notoriously hard. No matter how much individual faculty members might want to innovate, the fixed curriculum and departmental organization work against trying new ideas. Smokey and Steve Zemelman invented a structure for getting around this bottleneck that was strictly one-day-at-a-time.

ACTION: Gather three willing teachers from different subjects and ask them each to choose one of their classes. Find a space for these eighty or ninety people and spend the whole day (or a half day) together investigating an interdisciplinary topic the kids care about. Just to make it even more special, put everyone on a first-name basis and break bread together. We've done rivers, migration, gangs, community history, and more. These incredibly powerful and personal learning days made everyone else in the building jealous—and often sparked a districtwide willingness to find more time for inquiry.

6. Support Multi-Section Interdisciplinary Courses

SITUATION: For middle and high schools, this can be a logical next step after teachers have tried in-school field trips. Find a few teachers who want to team up and teach inquiry style, and let them develop elective interdisciplinary courses (English, U.S. history, and art; science, mathematics, and English) that cover two or three required courses. Turn these teacher teams loose to plan these courses with kids in mind. Trust them—if they want to make this huge commitment of time and planning, they'll do a great job.

ACTION: Find a space in the building where these groups can work near each other, with a gathering space big enough for everyone. To recruit students (and have a rich, diverse group of kids) design this as a "regular level" course. Yes, those AP and honors-track kids seeking a 5.0 GPA on a scale of 4.0 will opt out. But the main problem we have had in helping set up these courses is *oversubscription* of students, and especially parents who are dying for their kid to find something interesting to do in school. Not only do these creative courses give fifty or seventy-five kids a special experience—and some teachers a sorely needed growth path—they also create a *big* shift toward inquiry in a school. As other teachers see how fulfilling this kind of work is, not to mention samples of kids' often-impressive work, they want to do it too.

7. Pursue Post-Unit Inquiries

SITUATION: Our colleague Sara Ahmed is a master teacher of big, curricular inquiry projects, scattered through the year. But, like the rest of us, she also has to teach required content units as part of her middle school's curriculum. So, as she is covering content in a more traditional way, Sara always has a dedicated Wonder Wall posted, and she invites kids to post their own extension questions or inquiry ideas as the subject unfolds.

ACTION: After you have finished the teacher-driven portion of the unit (and thus helped kids to build the kind of background knowledge that good questions come from), save a couple of days for kids to purse their own questions. They grab the ongoing Wonder Chart, add new questions, and take a few class periods, in pairs or small groups, to research their own "bonus questions." Sara reports that these post-unit inquiries often solidify kids' interest in topics and tempt them to dig even deeper.

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8. Try Inquiry Cycles: The Turn-Taking Curriculum

SITUATION: When a full-time inquiry curriculum is not possible, some schools commit to doing it part-time. At the teacher-led Best Practice High School in Chicago, the year was divided between about thirty-two weeks of single-subject instruction and eight weeks of multidisciplinary inquiry projects, where all teachers dropped their specialist roles and became research facilitators. (The teachers often joked that they were doing an "Evelyn Wood" speed version of their regular subjects, since they had to cover the official city curriculum in much less classroom time than other teachers enjoyed.) Indeed, the internationally vaunted Finnish education system is currently moving toward this inquiry cycles model (Strauss 2015).

ACTION: The students' inquiries are typically scattered in two- and three-week chunks throughout the year. These can be whole-school events or can be staggered by grade levels. In the latter model, at least one grade level (or team) is always doing an inquiry, while the rest of the students (or other grades) remain on the regular schedule. Inquiry topics can be developed by teachers or students or both, working together. At the end of each year at BPHS, teachers gathered each class (except departing seniors) and co-created an inquiry agenda for the following fall. Among the topics students proposed and later investigated were fast food, gentrification, nuclear energy, gangs, war, racism, and inventions.

9. Treat Inquiry as a Regularly Scheduled Course

SITUATION: Some schools have a separate class period called "Project" or "Inquiry" that's built right into their daily and weekly schedule. At the Duke School in Durham, North Carolina, for example, inquiry projects are at the heart of this K–8 school's mission and are structured into the DNA of the whole year.

ACTION: Every teacher is employed both as a subject matter specialist (English language arts, math, science, social studies) *and* as a project teacher. In addition to regular subject-area classes, the kids have three or four 50-minute periods per week for the project. While project work sometimes extends into regular subject classes, it always has its own separate time. The inquiry topics can be developed by teachers and repeated every year, but each should be broad enough to allow for a wide range of student choice and responsibility under a larger umbrella. So whatever else they are doing, every kid from K to 8 is *always* working on an inquiry project. And, several times a year, these projects can culminate in a learning fair where kids share their learning with parents and the whole school community.

10. Culminate the Year with Capstone Projects

SITUATION: Many schools, particularly high schools and middle schools (but of late even elementary schools), are adopting multifaceted year-end projects that incorporate a range of creations that demonstrate learning and understanding. The term *capstone* originates in architecture and relates to the final step in the construction of a structure. The piece at the very top of the triangle in the Great Pyramid is known as the capstone, so Capstone projects reflect the culmination of a student's learning and understanding over time.

ACTION: In Capstone projects, students might create videos with text and music tracks. Or craft advertisements and public service announcements. Or build art and tech, robots, paintings, or murals. They can share their information on the web, through blogs, websites, or YouTube. Often, Capstone projects entail a public event where families and community members gather to celebrate students' learning.

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In the Scarsdale Public Schools, every fifth grader engages in a year-end research project on a topic of interest. Through these projects, kids have the opportunity to learn more about something they care about and to demonstrate the reading, writing, research, and technology skills they have attained over their elementary school career. At Hommicks Middle School in Mamaroneck, New York, eighth graders design a culminating project of their own choice, research it, address their questions, and share their information in a public forum. Burley Elementary in Chicago Public Schools holds an exhibition titled "Explore More" at the end of each year. Every grade level from K–8 participates. Check out Sara Ahmed's class' culminating project on Coney Island and the 1920s on our video collection, *Inquiry Circles in Middle and High School Classrooms* segment "Take Learning Public."

11. Adopt a National Model

SITUATION: Instead of inventing their own inquiry model from the ground up, some schools find it helpful to join up with a well-structured, full-service national model.

ACTION: Project-Based Learning (PBL), working through the Buck Institute for twenty-five years, offers a full range of inquiry learning supports to teachers, schools, and districts. Expeditionary Learning (EL), an especially effective iteration of PBL, is modeled on the Outward Bound wilderness education program. In EL schools, students engage in a series of "learning expeditions"—ambitious, authentic, extended, and highly focused group investigations. Among the program's design principles are self-discovery, empathy, collaboration, diversity, and "the having of wonderful ideas."

For one example of an EL approach, consider the Rocky Mountain School of Expeditionary Learning (RMSEL) in Denver. Here, a diverse student body works through a year full of learning projects that parallel the inquiry circles we describe in Chapter 9. When the middle school kids at RMSEL study the civil rights movement, they first spend weeks digging into the history and literature of the period, developing their own questions about the dynamics, people, and settings of the era. Then they travel to Memphis and other civil rights landmarks to seek answers to their questions. All this work is supported by the national organization, which provides resources, professional development, instructional videos, and in-classroom coaching for teachers.

The Research on Inquiry Learning

Teaching with extended, experiential, and collaborative investigations is not just something we've cooked up in the twenty-first century. "Wisdom begins in Wonder" stands to this day as one of Soccrates' most memorable quotes. And inquiry teaching is actually a long-standing *movement* in education. It traces back to the 1590s, where it began in the academies of Paris and Rome, as students were given authentic problems to solve, such as designing a building or monument. The application of this method to architecture and design became a standard approach and spread through Europe. In 1865, project teaching was introduced to engineering students at the Massachusetts Institute of Technology.

Later, John Dewey paved the way for inquiry projects with elementary and secondary students. Dewey argued that the public schools should be working, authentic communities, and he emphasized the social aspects of learning. He