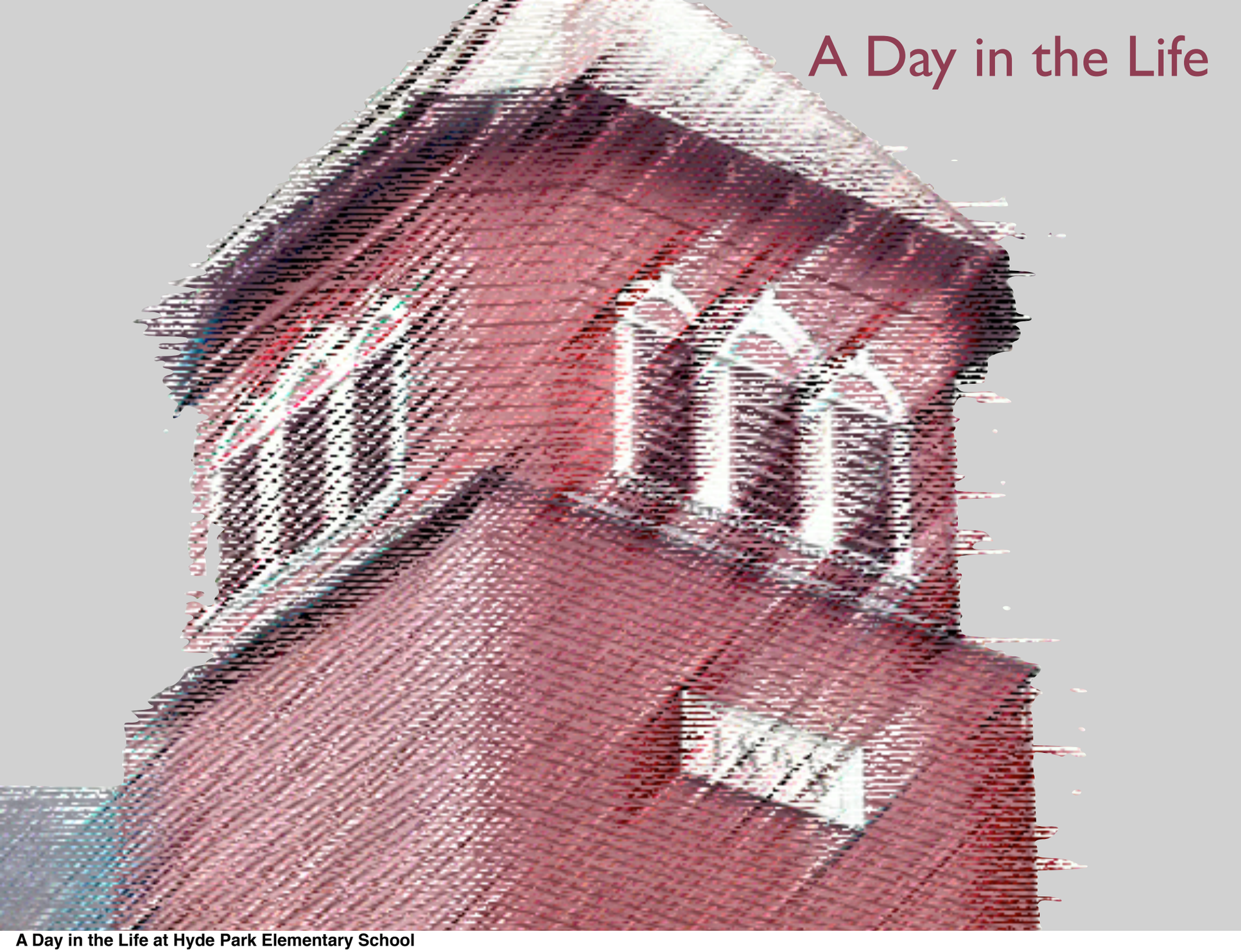
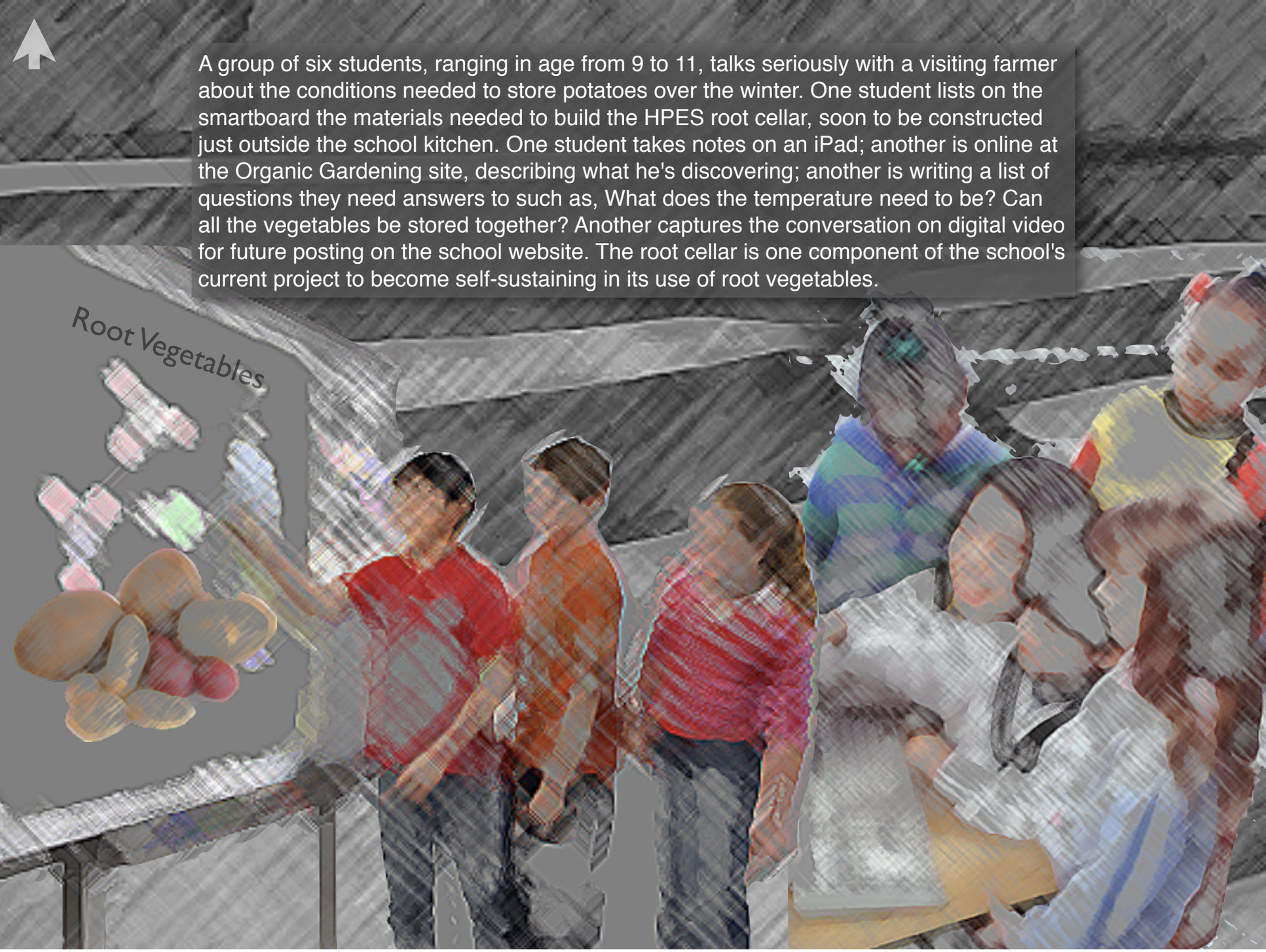
A Day in the Life



A Day in the Life at Hyde Park Elementary School

To help us envision the kind of education our students need for the future, the Hyde Park Elementary School community will take you on a short tour of what we'd like to see happening with our students and teachers.

We enter the school through an air-lock insulated doorway that leads down a short hall to the Learning Commons, the heart of the school. From this spot we can see a variety of learning activities taking place. Let's look closely at each one in turn.



Potatoes

A group of six students, ranging in age from 9 to 11, talks seriously with a visiting farmer about the conditions needed to store potatoes over the winter. One student lists on the smartboard the materials needed to build the HPES root cellar, soon to be constructed just outside the school kitchen. One student takes notes on an iPad; another is online at the Organic Gardening site, describing what he's discovering; another is writing a list of questions they need answers to such as, What does the temperature need to be? Can all the vegetables be stored together? Another captures the conversation on digital video for future posting on the school website. The root cellar is one component of the school's current project to become self-sustaining in its use of root vegetables.

This group works in the Learning Commons, a large, circular room with stadium seating, surrounded by a ramp leading up through several levels. Connected to the Commons are several smaller rooms for small group instruction: a kitchen, a laboratory, a library, a fitness center. Large windows and glass doors look out onto the garden and nature trail. Movable walls enable the Commons easily to divide into smaller spaces.
Up the circular ramp on one side of the Commons we see a small group gathering space with wireless access, an interactive whiteboard, comfortable seating for all ages of students.

In their hands the students hold the same kinds of working tools that adults use in the world outside of school: books, iPads, laptop computers, digital video cameras, and smartboards.

The planning of the root cellar is a component of HPES' annual community-based theme, which this year is called *Roots*. Around this theme the school faculty has re-engineered the curriculum, building the mastery of basic skills and complex concepts into a series of highly-structured study projects. Students work on these projects in multi-age groups led by teachers and community volunteers, using a range of study tools. Each project concludes with a presentation of their findings by the students to the community.

Garlic

Two young students carefully measure the distance between the garlic bulbs they are planting in the garden. Similarly they measure the distance between rows, and the depth of the planting. They report this to an older student who enters the numbers into a garden database on her iPad. She suggests they take a moment now to attempt the practice test on measurement in preparation for the state test. They log on and complete the section successfully. Meanwhile, other students wheel over composted leaves to mulch the bed. Another student records the activity on video to be shared with partner schools in France and China. The plantings are based on a careful calculation by students of how many bulbs to plant in order to yield sufficient garlic for the cafeteria's use the next year. Their records are kept on a spreadsheet in the group's computer.

The school garden takes up a large plot right off the school's play area. Surrounded by a fence and bordered by a large tool shed, it's well-drained and maintained by students, staff and community members year round. Math, science, world culture, geography, and writing are just some of the curricular areas that this garlic-planting project touches. Opportunities are taken throughout the day for students to practice and master concepts found on the state achievement tests. The activity is carefully structured to involve students of all ages.

Root Cellar

A teacher reads a chapter from The Root Cellar, *by Janet Lunn to a large group of 10-11 year-olds along with a handful of younger children. They frequently interrupt to ask questions about the olden days in Hyde Park : Was Hyde Park a stop on the Underground Railroad? How can we find out? One student records the questions on her iPod so she can remember them for the upcoming visit by the president of the Hyde Park Historical Society later in the week. Another student searches on his iPad the history of the Underground Railroad in Vermont. Several children have their own copies of the book and follow along. The smartboard displays Google Earth so the children can see where the story is taking place. At the end of the chapter, the teacher reminds the students of the virtual visit from the book's author scheduled for next week, and assigns them to prepare some questions for her.*

This lesson takes place on the ground floor of the learning commons. Carpeting on the floor and the walls keeps it quiet. The teacher sits in a rocking chair while the students sit on cushions in the first row of stadium seating. Some hold paper copies of the book being read, others read along on iPads where they can tap to understand words they are having trouble with.

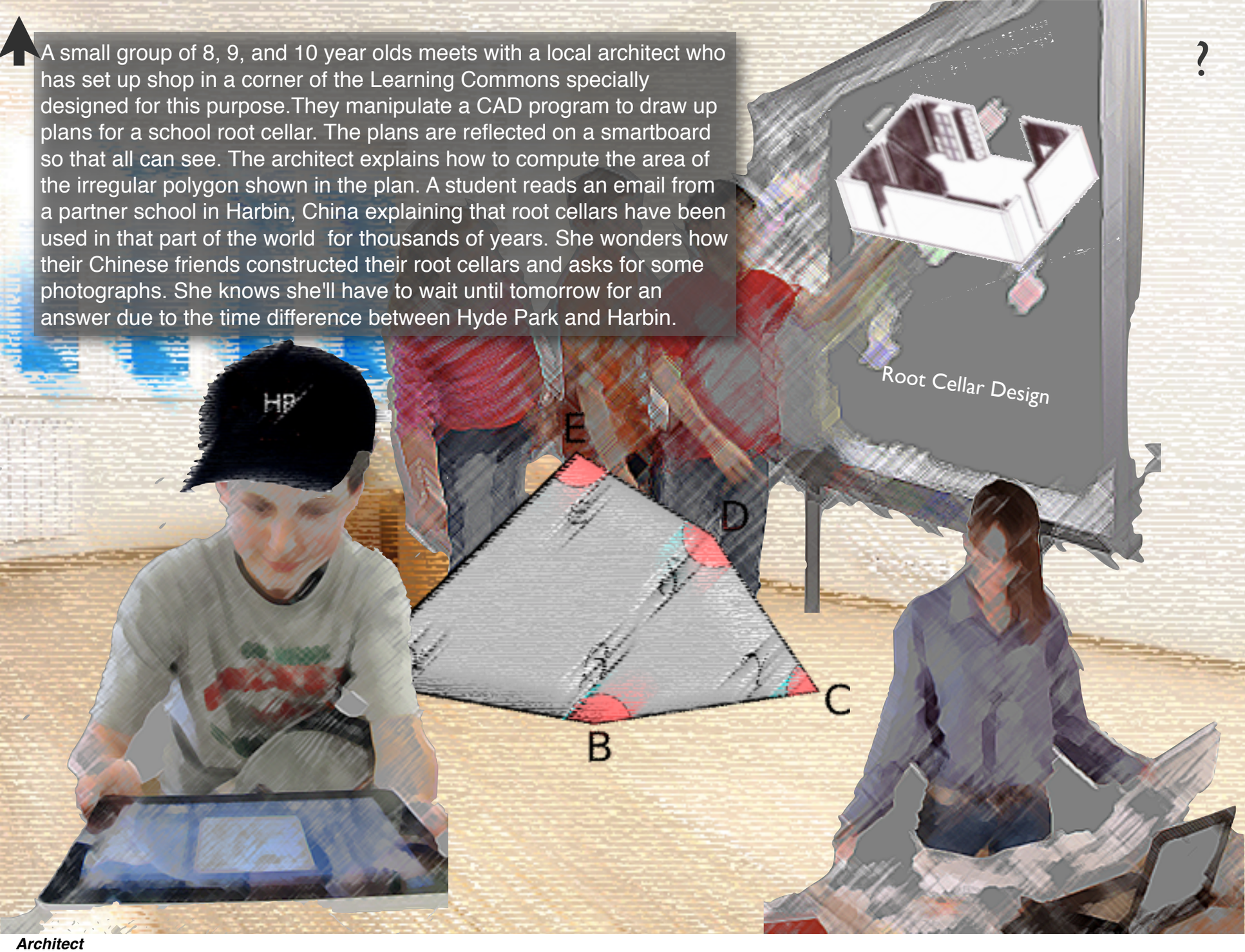
The books that students read are carefully chosen to reflect the schoolwide themes each year. Students work in a variety of groupings, sometimes by themselves and sometimes with a teacher or community volunteer. They are encouraged to extend their learning beyond the story, to ask questions and seek answers. Students have learned to search effectively and efficiently using computers and hand-held devices, to summarize what they've learned and to use multiple sources in their inquiries. They fully expect to have frequent interactions with visiting community members, both face-to-face and online through video chat.

Experiment

Five- and six-year old students plant potato eyes in boxes of soil, at varying depths to see which grow better. They use a digital camera to photograph the process and record it in their online science journals. Here they compose sentences describing how they planted their potatoes and predicting which will grow best. A teacher and a local farmer oversee this experiment. It's a bit messy but they're all having a good time, and will be able to wash up in the sink in the corner of the laboratory where they are working. An eight-year old helps a 6 year old to count aloud the number of potato hills, and to record the result on the class chart.

The Laboratory is a room devoted to active, sometimes messy, but always carefully planned science experimentation. An open work area, tables at various heights, storage shelves, and dedicated equipment allow for a smooth flow of activities. This area houses the school's science materials, tools, and spaces for ongoing experiments of all kinds. Each experiment is designed to provide practice in the basic skills of reading, measuring, and computing, as well as the critical thinking skills of predicting, imagining, and drawing conclusions.

Even the youngest children participate in school-community projects and science experiments. And they all learn to help each other throughout the day. Not every student arrives at school with the most basic skills, and these are often assigned a mentor in the form of an older student who work with them as they learn.



Architect

A small group of 8, 9, and 10 year olds meets with a local architect who has set up shop in a corner of the Learning Commons specially designed for this purpose.They manipulate a CAD program to draw up plans for a school root cellar. The plans are reflected on a smartboard so that all can see. The architect explains how to compute the area of the irregular polygon shown in the plan. A student reads an email from a partner school in Harbin, China explaining that root cellars have been used in that part of the world for thousands of years. She wonders how their Chinese friends constructed their root cellars and asks for some photographs. She knows she'll have to wait until tomorrow for an answer due to the time difference between Hyde Park and Harbin.

The school welcomes visiting workers from the community who represent the full range of occupations. A special area is set aside for them to work in, with a worktable, internet access, and space for students to sit when they drop in or participate in a career workshop.

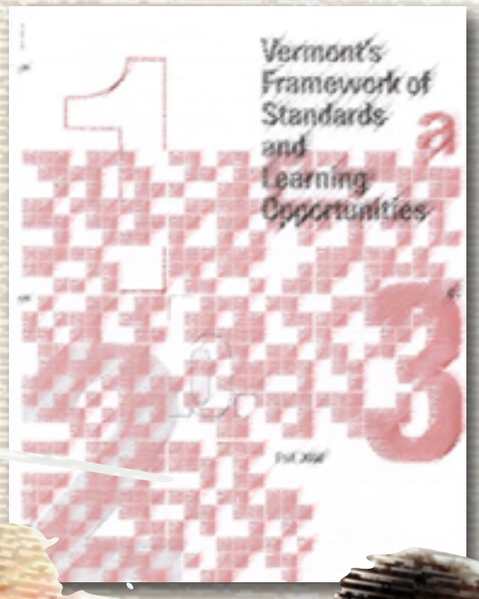
The visiting workers are carefully selected each year to contribute to the schoolwide project. Students engage with these community members to accomplish challenging tasks and see how the basic skills are integrated into real life. The visitors for this year will include farmers, UVM outreach workers, architects, builders, cooks, and gardeners.

Prepositions

Zzzzip, glass doors close up to separate a small classroom from the learning commons. In the room a small group of students struggle with prepositions. The meanings of over, under, on and in are challenging to these three- to five-year old children. The teacher, along with a sixth-grade teaching assistant, engages them in a smartboard activity where they drag objects while chanting The Preposition Rag, *a song, written by older students.*

Flexible spaces in the school allow rapid transformation to serve various educational needs.. This space, adjacent to the learning commons, includes an interactive whiteboard, tables and chairs. Having such a workplace easily available allows teachers to pay careful attention to those students who need more support in order to fully participate in the school's curriculum. It's important to the whole school community that all children succeed, so older students are often engaged in making materials to be used with younger students.

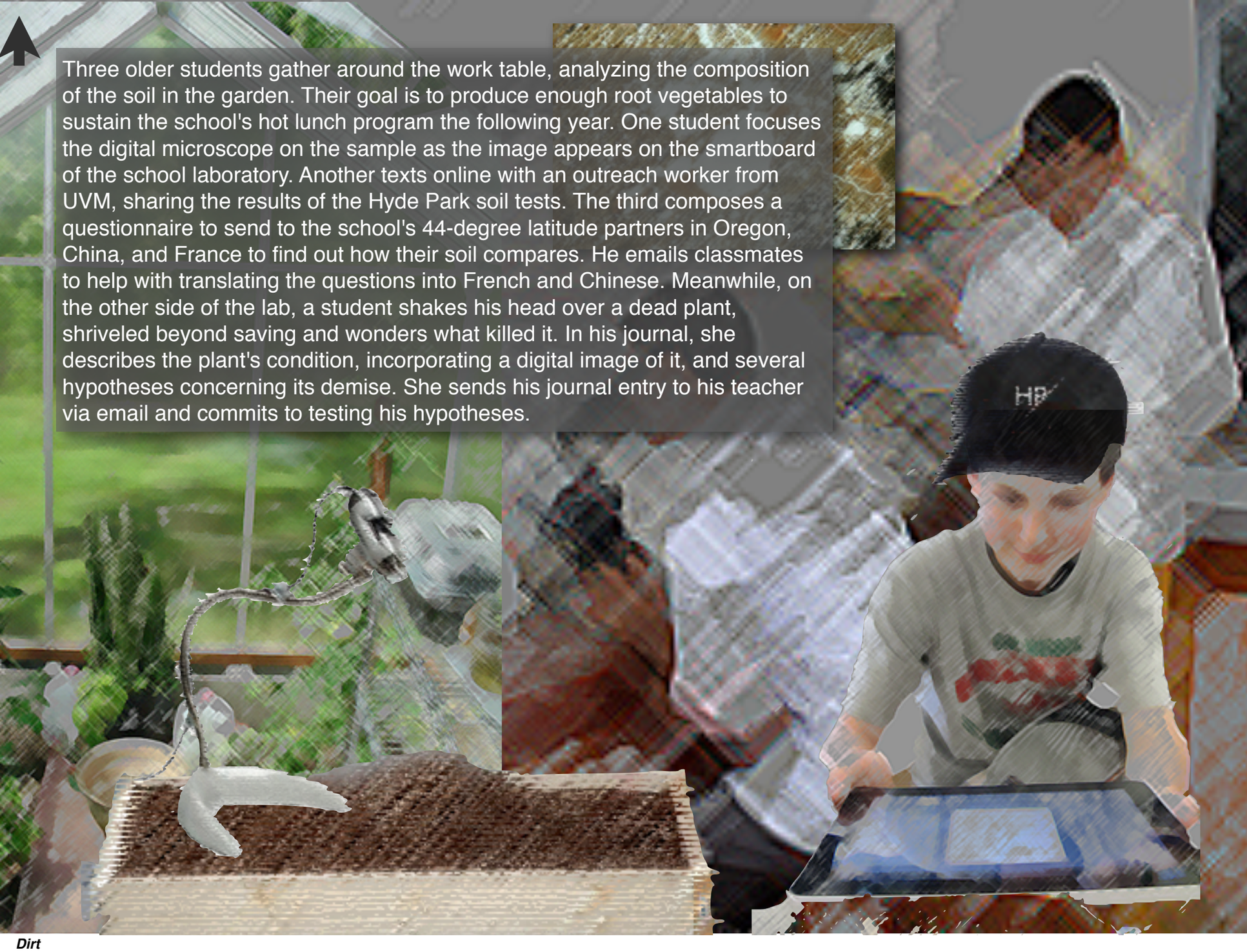
In another flexible workspace off the learning commons, five teachers work out the details of the mid-winter schoolwide academic projects on weather's impact on the garden. While their homeroom students are engaged in other activities under the supervision of community volunteers, this group schedules an hour of joint planning to re-design their curriculum around this theme. They search for ways to include the state standards in reading, writing, mathematics, social studies science and health into the common theme. One teacher shows the group how students can produce their own books on their computers -- he downloads images from her camera, arranges them to tell a story, and composes text from the keyboard. The teachers choose the book-publishing as the culminating activity for the unit.



Re-engineering

In another flexible workspace off the learning commons, four teachers work out the details of the mid-winter schoolwide academic projects on weather's impact on the garden. While their homeroom students are engaged in other activities under the supervision of community volunteers, this group schedules an hour of joint planning to re-design their curriculum around this theme. They search for ways to include the state standards in reading, writing, mathematics, social studies science and health into the common theme. One teacher shows the group how students can produce their own books on their computers -- she downloads images from her camera, arranges them to tell a story, and composes text from the keyboard. The teachers choose the book-publishing as the culminating activity for the unit.

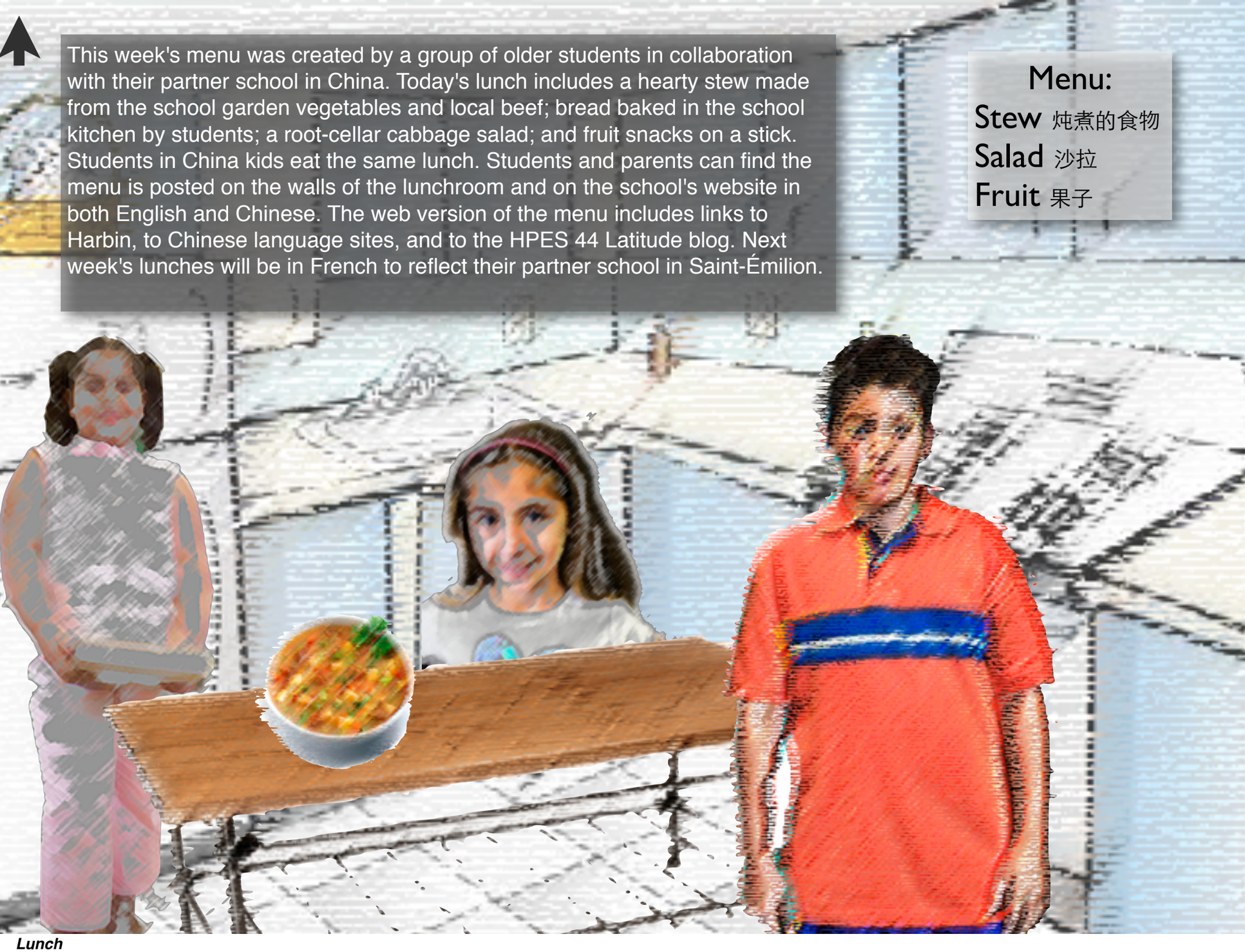
The Hyde Park School must re-engineer the tradition grade-by-grade, subject-by-subject curriculum to fit the new school that they have built. Like their students, they carve out time in the school day to accomplish this work. The school provides the faculty time, space, and equipment necessary to craft the kinds of units that combine multiple ages and curriculum areas into school wide projects.



Dirt

Three older students gather around the work table, analyzing the composition of the soil in the garden. Their goal is to produce enough root vegetables to sustain the school's hot lunch program the following year. One student focuses the digital microscope on the sample as the image appears on the smartboard of the school laboratory. Another texts online with an outreach worker from UVM, sharing the results of the Hyde Park soil tests. The third composes a questionnaire to send to the school's 44-degree latitude partners in Oregon, China, and France to find out how their soil compares. She emails classmates to help with translating the questions into French and Chinese. Meanwhile, on the other side of the lab, a student shakes his head over a dead plant, shriveled beyond saving and wonders what killed it. In his journal, he describes the plant's condition, incorporating a digital image of it, and several hypotheses concerning its demise. He sends his journal entry to his teacher via email and commits to testing his hypotheses.

In the school's fully-functioning greenhouse and adjoining laboratory, students grow plants year-round, start the garden plants in the spring, and conduct experiments. The work in the greenhouse is part of the community-based theme the school tackles each year. The faculty structures the work so that students take the roles of scientist, researcher, and practitioner. Many of the theme projects are carried out with partner schools across the country and across the globe. And when things go wrong, students are encouraged to figure out the reasons, using the scientific method.

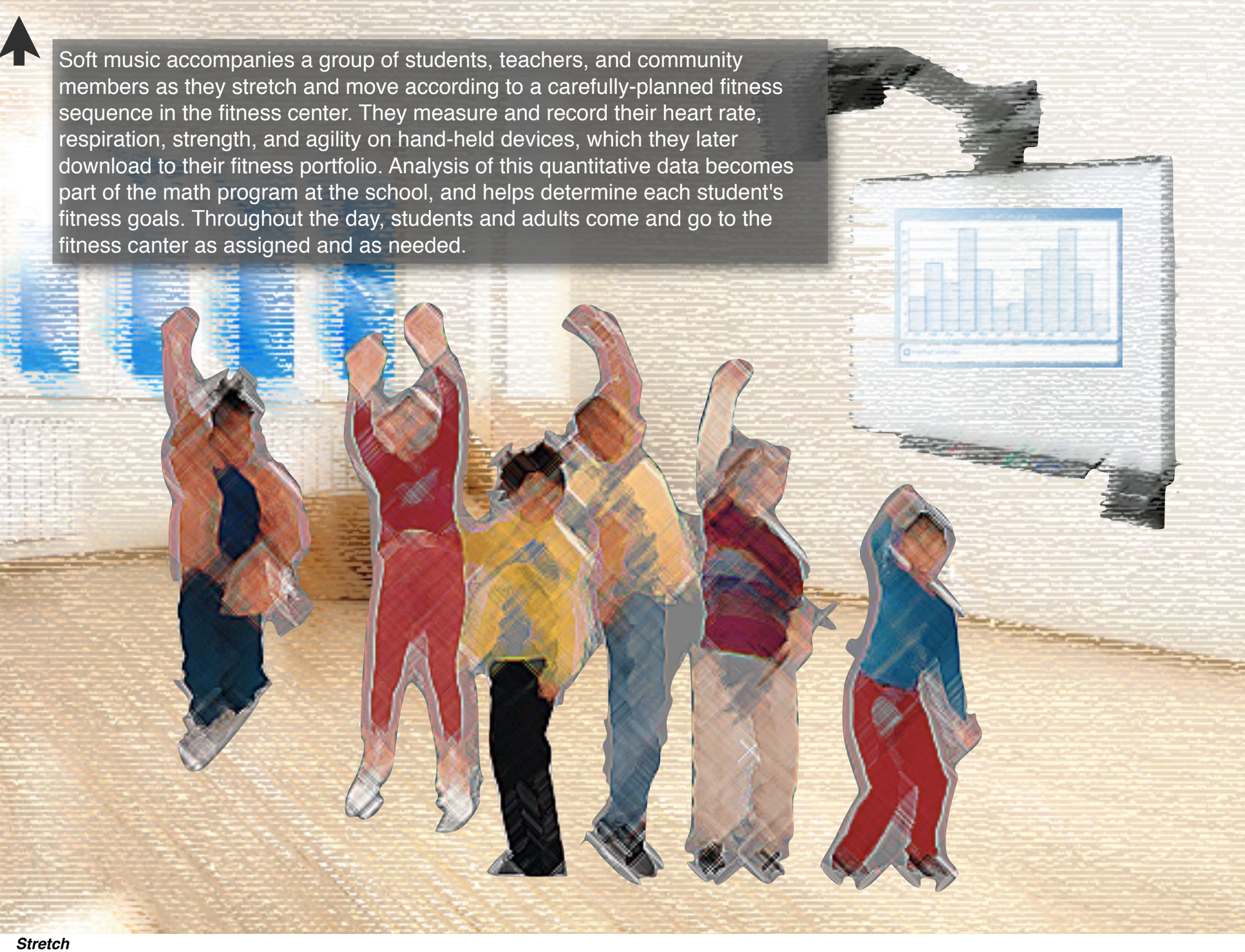


Lunch

This week's menu was created by a group of older students in collaboration with their partner school in China. Today's lunch includes a hearty stew made from the school garden vegetables and local beef; bread baked in the school kitchen by students; a root-cellar cabbage salad; and fruit snacks on a stick. Students in China kids eat the same lunch. Students and parents can find the menu is posted on the walls of the lunchroom and on the school's website in both English and Chinese. The web version of the menu includes links to Harbin, to Chinese language sites, and to the HPES 44 Latitude blog. Next week's lunches will be in French to reflect their partner school in Saint-Émilion.

The school kitchen is large, sunny, well-ventilated, bright work area for students, faculty, and staff. It meets all health fire codes, and features work surfaces at several different heights to allow for a dozen students to be involved.

Students at Hyde Park know intimately the food they eat, growing much of it in the school garden and getting the rest from local producers. The cook welcomes student participation in the preparation of lunches and snacks. The faculty engineers kitchen projects into the curriculum to incorporate math, reading, history and geography into the cooking experience. Students regularly show up in the kitchen to volunteer, while others come with their teachers.

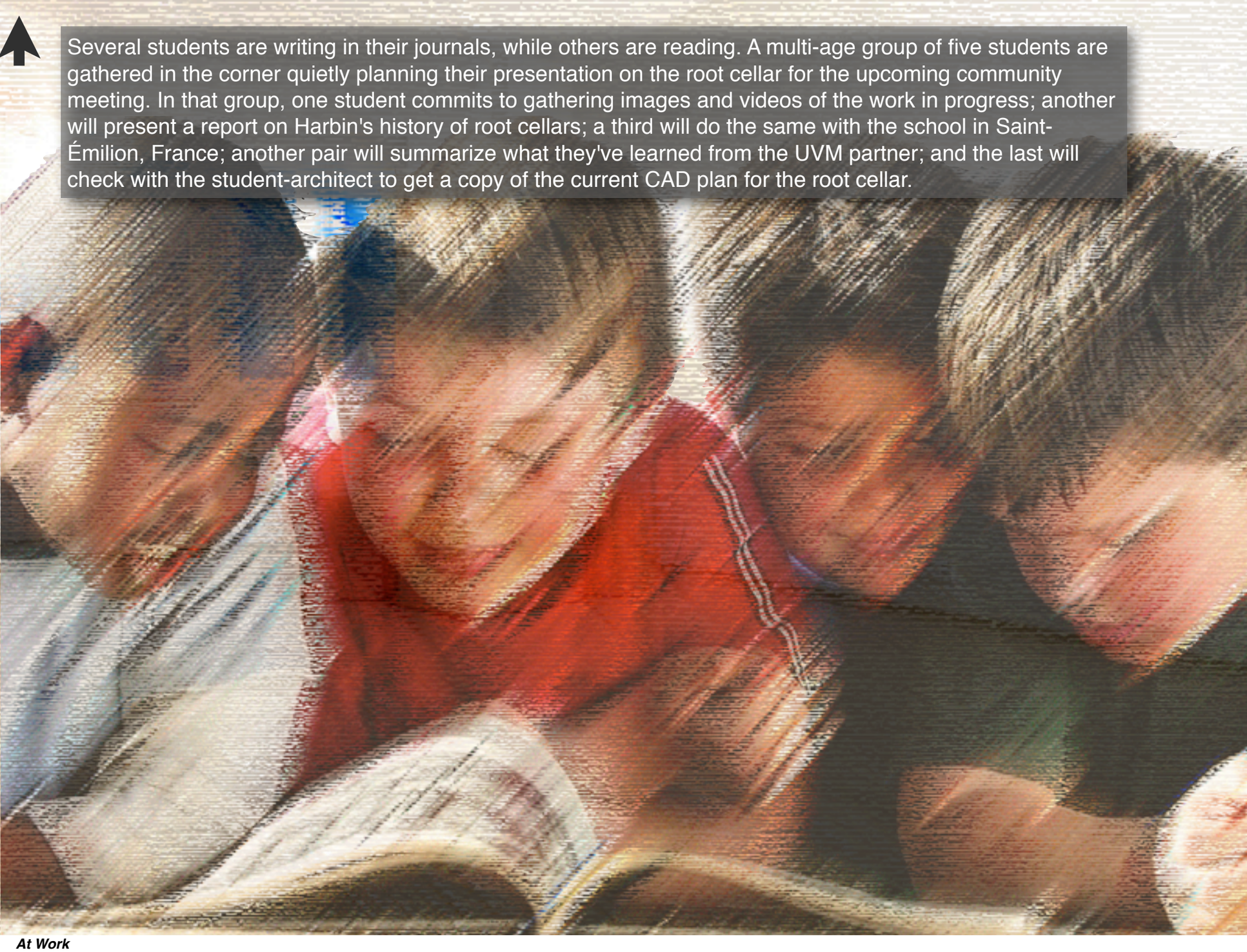


Stretch

Soft music accompanies a group of students, teachers, and community members as they stretch and move according to a carefully-planned fitness sequence in the fitness center. They measure and record their heart rate, respiration, strength, and agility on hand-held devices, which they later download to their fitness portfolio. Analysis of this quantitative data becomes part of the math program at the school, and helps determine each student's fitness goals. Throughout the day, students and adults come and go to the fitness canter as assigned and as needed.

The fitness activities take place in large south-facing room with views of the forest. The room is designed to provide large-motor opportunities for students and teachers as needed. With a padded carpet floor, a sound system, a computer loaded with music and fitness exercise sequences, projector and screen. A storage closet contains climbing equipment, a small trampoline, and balance boards.

This assignments students carry out in the fitness center make them aware of their bodies' needs to move and burn off energy throughout the day.



At Work

Several students are writing in their journals, while others are reading. A multi-age group of five students are gathered in the corner quietly planning their presentation on the root cellar for the upcoming community meeting. In that group, one student commits to gathering images and videos of the work in progress; another will present a report on Harbin's history of root cellars; a third will do the same with the school in Saint-Émilion, France; another pair will summarize what they've learned from the UVM partner; and the last will check with the student-architect to get a copy of the current CAD plan for the root cellar.

Several quiet workrooms off the learning commons allow students and teachers to work undisturbed by the chatter and activity of the rest of the school. Work tables, comfortable seating, and areas conducive to small group discussions, are designed especially to support various sizes and ages of students. Students use books, papers, small handheld devices, and good wireless connectivity to get their work done in these rooms. Hyde Park students and teachers know the importance of time and space allocated for deep thinking without distraction.

Winter

A group of young students and their teacher walk out the door to the school's nature trail, where they hike, observe, discuss, and record signs of the coming winter. They photograph squirrels scurrying to hide acorns. They talk about how their root cellar will serve the same function for the humans in their school. They look up the names of the plants and animals they find, and label them with common English and scientific Latin placards. They measure the width of trees, and record them for comparison next year.

Hyde Park parents and community volunteers built a nature trail that leads to the riverbank. The trail serves as a boardwalk for full access by school and community members. Students and teachers take full advantage of the natural environment to teach science, math, and language. Teachers encourage students who draw connections between what they observe and what they're studying in the classroom.

Morning meeting

25 students of mixed ages gather for morning meeting. While a 7-year-old reads the outside temperature, a 9-year-old records it on the weather spreadsheet on the interactive whiteboard. Another student reports the current temperature and weather in their partner schools in Saint-Émilion and Harbin, found online and recorded in the spreadsheet. The teacher sits behind the group, encouraging the 11-year old who is running the meeting this morning. The leader confirms that the whole class has eaten a healthy breakfast that day, the 20th day in a row for this group. They are currently tied for first place in the Healthy Start contest. After morning meeting, the group disperses to various assigned activities based on their learning needs. They will regroup at lunchtime to review the morning' s activities and eat together with their teacher.

In spaces that double as large group instruction spaces, homeroom group meets three times a day with their teacher. Each room includes a bathroom, sink, storage closet, accessible entrance and exterior door. Students are very comfortable in a multiage setting, expecting and getting support from their peers.