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Cambium

VOL. 7, NUMBER 1

INNOVATIVE K-8 CURRICULUM FROM THE ARBOR SCHOOL OF ARTS & SCIENCES

HARNESSING CHOICE

Even a casual observer of student life at Arbor School will quickly notice that our children have a great deal of freedom to pursue their own curiosity. Every day in the K-1 Primaries begins with a period called Choice Time. Each new grade brings another crack at a major independent project. (See our Cambium issue "Independent Inquiry.") Our eighth-graders devote a full year to a Senior Project on a topic of personal interest, whether writing a novel, apprenticing to a blacksmith, or learning to fly a glider.

But most of the articles in these pages focus on choice as it plays out within the curriculum, in service of teaching literacy or mathematics, P.E. or research skills. Choice turns out to be a vehicle for developing a great many habits and attitudes we prize: independence, yes, but also self-motivation, open-mindedness, collaboration, effort, willingness to dig deep and tackle difficult material. Giving students multiple points of entry into any unit of study is necessary in our mixed-age classrooms, but providing them with choice also helps us ensure that everyone is genuinely engaged and moving toward our greater academic aims.

Teaching for depth as well as granting students leeway requires constant recalibration on the part of the teacher. Knowing when to draw in the reins is as important as sensing when to give students more freedom; our teachers all discuss the real constraints they put in place to guide students toward choices that will lead to productivity and growth. But we always begin by trusting a student's assessment of the right level of difficulty, the most intriguing topic, or the most promising way forward. His choices give us invaluable insight into the person he is becoming, and those glimpses allow us to make our own choices about how best to support him toward the fullest realization of his individual self.

This issue of Cambium invites you to consider the place of choice in opening the school day, in getting to know fascinating characters from history, in using the library, in advancing through algebra, and in participating in P.E. We hope it will provoke thought about where's there's room for choice in your own interactions with children and we welcome an exchange of ideas.

In this issue

ARBOR SCHOOL
OF ARTS & SCIENCES

CHOOSING TO BEGIN
CREATIVITY & PRODUCTIVITY AT CHOICE TIME

by Sarah Pope, ACT publications editor

It's Choice Time in the Primary Nest. Ella is quietly and independently stitching a fairy dress from scrap fabric. Four or five of her classmates are building a marble chute in the block area, while a handful of others are hard at work attempting to teach the class guinea pigs some simple obedience commands. A few children are curled up in odd corners, lost in a good book. Ronin is writing poems about the songbirds she studied for her independent project. Other kids are working on birthday cards for a staff member. "There are days when it just feels silly to ring the bell," their teacher Felicity confesses.

There's general appreciation at Arbor for the idea of non-commissioned work, the really interesting stuff that bubbles up when we free our minds from the constraints of what we ought to be doing. From the "Friday evening experiments" that won Andre Geim and Konstantin Novoselov the 2010 Nobel Prize in physics to the time for tinkering granted to employees of Google and Twitter, there's plenty of evidence that carving out space to mess around with new ideas is a powerful driver of innovation. In this vein, a child in the Arbor Primaries is free, from the moment of his arrival (between 8 and 8:30) until the 9 o' clock bell rings to begin each school day, to follow any whim—often with marvelously creative results.

Madison and Ella with one of the guinea pigs in training

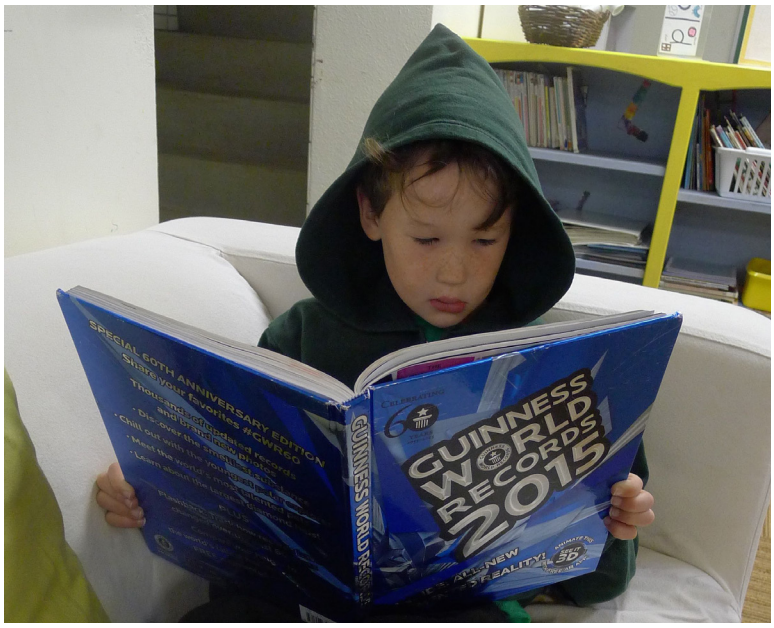
In school, Choice Time doesn't just produce deliciously scary Frankenstein masks to wear at recess and soda-can boats to launch in the school pond. The children collaborating to build a marble chute are learning about cause and effect, iterative design, patience, and impulse control—at this age, *not* pushing ahead of someone else because you can't wait to send your marble down the new course is a laudable act. There's real fledgling research happening amongst the guinea pig trainers, who have a clipboard and a T-chart to track their success in coaxing the piggies to "come" before and after feeding them.

"Make no mistake," Felicity says, "there are also days when it doesn't feel productive." Some kids need help making a choice—or making a *good* choice. Some are natural observers, more reluctant to plunge in and put their hands to work. There's a rule about work in the Junk Box room: you have to be building something, not just ricocheting between groups. A short period of observation time can be appropriate if children need to watch first and ease in, but Choice Time is meant to be productive for all. For some, Felicity sidles up and offers herself as collaborator to help them get started. And she's not above making a choice for them if they're uninspired or there's too much flittering about the room. For anyone who chronically complains of boredom, the greatest value of Choice Time is the daily practice it gives him in conjuring his own engaging work. At the other end of the spectrum is the child who fixates on a single pursuit. Felicity doesn't try to push these dedicated workers out of making the same choice day after day. The time is their own as long as they are productive.

Choice Time highlights the importance of teacher instincts and flexible time. Felicity is able to gauge the hum in the room and make her own judgments about stretching or curtailing the work period; at Arbor time is held in the hands of the teacher as if she were an orchestra conductor rather than a train conductor. Latitude for choice is as important for creative teaching as it is for innovative learning.

A boatful of Nesters setting out on a journey at Choice time. The thematic curriculum often inspires Choice play.

Community contributions take shape at Choice time, too. These Primaries are painting a sign for the class booth at our school festival.



When in doubt, pick up an interesting book.

I CHOOSE, THEREFORE I AM
DOUBT, DESCARTES, & RENAISSANCE BIOGRAPHY

by Marc DeHart, Intermediate (4-5) teacher

Each year we devote to the Inventions & Discoveries theme in the Intermediate classroom includes an in-depth research project on a Renaissance figure of note. The rebirth of learning and the challenges to authority and conventional thinking that occurred during this time are excellent fodder for the minds of fourth and fifth graders, who are beginning to understand the potency of their own ideas in new ways.

During this unit the Intermediates read and learn about various figures—explorers, religious and political leaders, artists, scientists, doctors, inventors—and eventually choose one person to focus on. Students are enthralled by the great stories that earned a place in history for the likes of Galileo and da Vinci, and they investigate the qualities of their chosen character that embody the spirit of the Renaissance. After researching and gathering biographical details, students make specific claims about their person's contributions to human knowledge and use the evidence they've gathered to construct a supporting argument. Simultaneously, they complete a graphite portrait, bringing the explorer or artist to life with weeks of hard work during Design periods.

Abe's portrait of the Flemish cartographer Gerardus Mercator

When we present the Intermediates with the assignment of choosing a Renaissance figure to study, we first provide them with a simple list of names—some familiar (and overwhelmingly popular) and some unknown to them—and a shelf full of books. The list has headings (Artists, Doctors, Scientists, Mathematicians, Politicians, Religious Leaders, etc.) to allow the children to focus their initial research according to personal interest. A child who wants to study a figure in medicine, for example, won't have heard of Andreas Vesalius, but can use the Doctors heading to identify him as someone to consider while browsing the books. This initial skimming period allows children to read and discover interesting things about all sorts of Renaissance people before settling on a final choice. Some choose to learn more about someone they've just encountered, and others inevitably stay married to the idea of studying Leonardo.

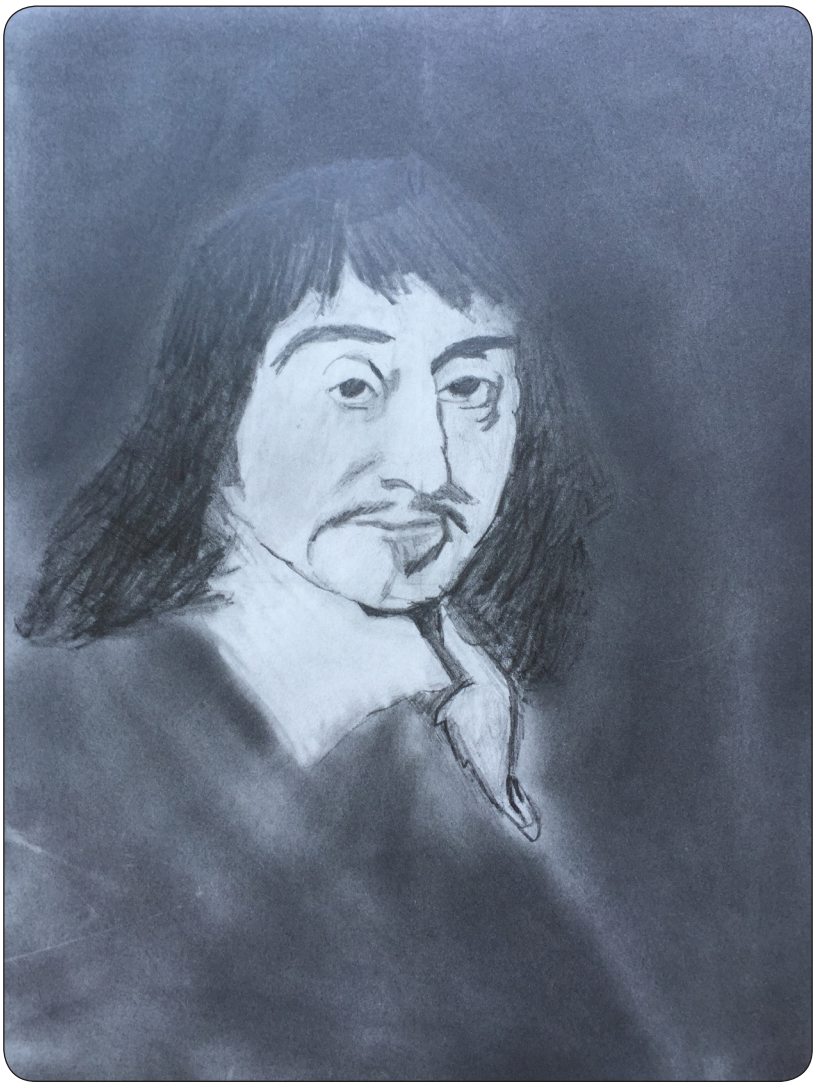
One of the interesting things about our current class is that, as a group, they are passionate about math. This made Blaise Pascal a popular choice—for most, he was the only Renaissance-era mathematician they had heard of before, and this was because they all remembered the fun of exploring Pascal's Triangle. But just as only one or two children could study Leonardo, only one or two could take on Pascal. We could duplicate our resources on these popular figures and share them out to a larger group of biographers, but that wouldn't accomplish the broader penetration into the important ideas and players of the period that we want for the class as a whole. This meant that I would have to sell another mathematician to at least a couple of the kids.

I began with a conversation about the new types of thinking that made the Renaissance such an influential time in history. I tried to convince them that these men (Descartes, Pascal, etc.) were more than mathematicians: they were philosophers. We talked about how Descartes specifically chose to study mathematics because he believed that it was the only discipline that dealt in absolute objective truth. (This aspect of Descartes's personal motivation came out of his great concern for what happened to Galileo when his findings contradicted the teachings of the Church.) This led to some musings about the nature of truth, what things we can truly know for sure, what things we can test or observe, and what things we simply take for granted. These big ideas are inspiring to Intermediates; they realize that revolutionary Renaissance ideas are the same ideas they like to think about—observing and recording patterns, making predictions, solving logic puzzles, etc.—and also that they themselves can be philosophers.

One of the thought experiments we talked about while discussing Descartes and why he was interesting was his famous saying "Cogito ergo sum"—*I think, therefore I am*. The mind-bending ramification of this simple truth is that although we might know that we exist because we can think, that is all we can know for sure. We discussed the consequences of never really knowing if what we observe is the truth, or simply some consequence of our own perception or circumstance. This conversation took the form of a discussion on whether a fish knows it's wet—and if it could ever know. I later heard Vivek leading a peer through this same thought experiment on the playground at recess.

Vivek and Nadia were ultimately swayed to choose Descartes. Both of them noted his important contributions to mathematics, but were most intrigued by the lasting impact of his fascination with doubt on modern philosophy. Nadia wrote:

> Doubt is a gift that René Descartes gave to us. Doubt doesn't sound like a positive thing but we can't live without it. René Descartes doubted everything: his own existence, other people, who made the world, and even his own senses! This was a very bold perspective to take on. René viewed the world by thinking differently and that has changed us.



Vivek's portrait of philosopher-mathematician René Descartes, after Frans Hals

Of course, delving into philosophy with these fourth-graders opened up new perspectives for them as well. The need to do some active guidance of student choice for this assignment led us into intellectual territory my kids might not otherwise have visited until high school or beyond. I believe it opened their eyes to some of the intriguing ways math is laced through other disciplines, and I hope this inspires them to pursue their interest in mathematics even further.

CHOOSING DISCOVERY
GUIDANCE & FREEDOM IN THE LIBRARY

by Kirsten Rian, Arbor Library

The light-filled Arbor library seems utterly peaceful, but it is bristling with baited hooks. Crisp hardcover picture books fresh from the printing press, inviting clusters of favorite mysteries, deliciously illicit banned novels—our students can choose any of them. They needn't know that each alluring book display bobs on a line of research skills, literacy and curricular goals, and inducements to fall in love with reading—all carefully cast by their librarian. In constructing their well-rounded education, in supporting the best habits of inquiry, in considering the varying needs and abilities of each child, the library offers the perfect setting for allowing students broad freedom while we reel them into ever more nourishing waters.

Kirsten reads to the Primaries

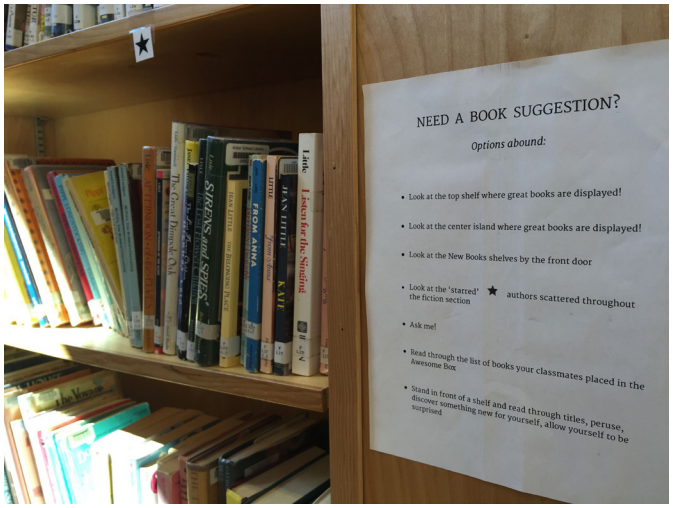
The Arbor library holds over 14,000 volumes, a trove of fiction and non-fiction, picture books, novels, and graphic novels. When a child visits the library asking for books specific to a topic they're researching, they must first learn how to navigate the library and the organization of those thousands of books. From their first months in kindergarten, students are taught how the Dewey decimal system works for nonfiction, and those skills are reinforced as they move up in grade level and cement their understanding of numeric ordering. Even if they can't yet read titles, the youngest students learn the landscape of the library well enough to locate the books on fairy tales, machines, animals, and other favorite subjects. They are free to browse and select their own books. I will draw on my own knowledge of our holdings to pull specific titles relevant to their curiosity of the moment. For the littlest children, I even make classroom deliveries: three different retellings of the Cinderella story straight into the backpack of an eager kindergartener, for instance.

Older children can operate more independently; if they are not familiar with tables of content or indexes, I will show them how to use those tools to find what they want. One of my favorite memories of last year was when three Junior boys spilled into the library, breathless at their discovery of a never-before-seen strange and wonderful bug. What was it?! A grasshopper, cicada, beetle? Together, we pored through a nonfiction insect book and discovered there can be locust species in the Pacific Northwest—who'd have thought? A bit of gentle guidance fosters confidence in their abilities to find information on their own, while also ensuring they learn effective research processes from a very young age. The more they mature, the more we scaffold and build upon specific research skills. Our Seniors must be able to apply what they've learned in the Arbor library to find resources to support their independent research in the public libraries, too.

Utilizing choice is also relevant and necessary in fostering a love of books and reading for enjoyment. There are students who explore the vastness of fiction genres, hop-skipping from fantasy to historical fiction and dipping into everything in between. But many, if not most, are drawn to and comfortable with one specific genre, and run the danger of closing themselves off from a tremendous array of rich and mind-expanding fiction. Marketing comes into play hugely in the library—and is most successful when firmly rooted in choice.

It's human nature to feel new is better, so our shelves with newly purchased and newly released books are placed right at the front door. In another area of the library, displays rotate every few weeks, sometimes for an author feature or a display of award-winners, sometimes to promote books in a series or even interesting non-fiction. Featured books always circulate at a higher rate than they would if hidden in the stacks, and each new display sparks exciting instances of discovery. One student, passionate in her love of fantasy and a bit inflexible about trying new genres, found new favorites from a display of historical fiction. Another student did not particularly enjoy reading and drooped at the thought of browsing thousands of titles on the shelves, but he would pick up display books and read their jackets, and eventually began checking them out. Everyone has a different way of making the acquaintance of a new book, so I try to provide both a variety of options from which students can choose and a range of avenues for their own searching and discovery.

The question I hear most each day is, "I need a book! Any ideas?" It then becomes my job both to suggest books that might appeal to that reader and to expose him to titles he'd not know about otherwise, to encourage a struggling reader, to lure a high-level reader to even more fulfilling texts, and perhaps most of all, to teach all the students how to do all this for themselves. Learning to stretch and struggle is no easy process, and that is why we teachers and librarians are here to light the way, offering structured choice and noticing the individual needs and abilities of each and every student.



In addition to my verbal suggestions and discussion, a bullet-point sheet with a variety of strategies for finding new books is posted on the counter by the front door as well as in the fiction section. Paper stars are taped to the shelves below particular titles or authors recommended by myself or staff. The top shelf running throughout the fiction section holds a rotating display of good books that simply ought to be read. The book return area has two baskets, a 'regular' returns box, and another beside it for books students especially enjoyed. Each month I type up a list of books returned to the "Awesome Box" and post it in the fiction section so the kids can look through it themselves and see what their peers recommend. The final suggestion on the bullet-point sheet is perhaps the most important, the last thing to be thought of, and the most effective in developing confidence and independence in making choices: *Stand in front of a shelf and read through titles. Peruse. Discover something new for yourself. Allow yourself to be surprised.*

Encouragement that promotes engagement is my aim as I help students build skills and as I consider how our library functions. From setting up a navigable landscape in the physical space of the library to offering a range of options for entry into research and the wonder of literary discovery, the goal is to encourage inquiry and heighten curiosity. Choice is more than a concept, it's a method of promoting this curiosity, fostering a kind of inquiry that will sustain learning well past the walls of any school.

CHOOSING MASTERY
AN ALGEBRA CURRICULUM FOR EVERYONE

by Linus Rollman, Senior (6-8) teacher

Learning math isn't optional. Algebra is a foundational tool for further learning in a plethora of disciplines, useful in daily work and thinking far beyond the realms of math and science, and every student needs to master it. That means tackling a prescribed set of ideas and operations, building upon skills, refreshing the memory and demonstrating new understanding along the way—all of which can result in rigid curricula requiring students to march in step and move along regardless of personal interest or grasp. Those who fall behind or bungle tests are often tracked into less ambitious classes, sometimes with no opportunity to accelerate again. At Arbor, we've tried to construct a flexible, collaborative system that supports every student along the path to mastery. A key component of that system is an algebra curriculum that allows children a great deal of personal latitude. In our experience, giving them choices makes them more engaged, more thorough and confident learners.

On a typical day in a Senior math classroom, students are clustered in small groups of two to six students, working through the algebra books that we have written in-house. Teachers move from group to group, talking with the students, listening in on their conversations and weighing in as appropriate, asking and answering questions, or working for a few minutes with an individual child. A teacher may interrupt the classroom hum and call everyone's attention to the board in order to work through a new kind of problem as a whole group or to invite a student up to demonstrate an innovative approach or an intriguing pattern she's discovered. This classroom structure, along with the books that we have written, creates opportunities for student choice in several areas.

With Whom Will I Work?

At the beginning of the sixth-grade year, and from time to time for special projects thereafter, students work in groups created by the teachers. The teachers assemble these groups with an eye to new possibilities, opportunities to put children in the way of new voices and perspectives, and fruitful partnerships that might emerge. Selecting collaborators for day-to-day work, however, falls largely to the students. They are asked explicitly to consider with whom they work best and to test their theories on this subject by occasionally trying new partnerships. Often, close friends choose to work together—an arrangement we don't *a priori* discourage—but just as often, students form working partnerships with peers with whom they rarely eat lunch or play games, and this provides a rich opportunity for both intellectual and social growth.

How Fast Will We Go?

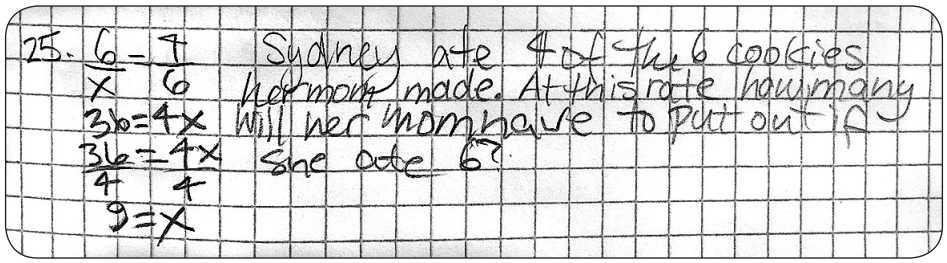
Our students typically have four hour-long math classes a week and are expected to do approximately half an hour of math homework five nights a week. All students are expected to finish our basic algebra curriculum before eighth-grade graduation, but this work schedule leaves a great deal of latitude for just how far and how fast to move. If a little band of motivated sixth graders completes *Jousting Armadillos & Other Equations: An Introduction to Algebra* in February, they simply move on to *Crocodiles & Coconuts: Equations in Two Variables*. Some students finish the algebra curriculum by the end of their seventh-grade year and move on to study geometry in eighth grade. The question of how ambitious a student's goals are (which often translates to how much extra time she is willing to put in at home) is often a determining factor in the question, "With whom will I work?" And, of course, the way is always

Sample chapters of all three of our algebra books are available for free download on our website: arborcenterforteaching.org/resources

open for a change in those ambitions. Since the classrooms are not tracked, if a particular student suddenly discovers a new passion and fire, he can accelerate his pace and, more often than not, change workmates as a result.

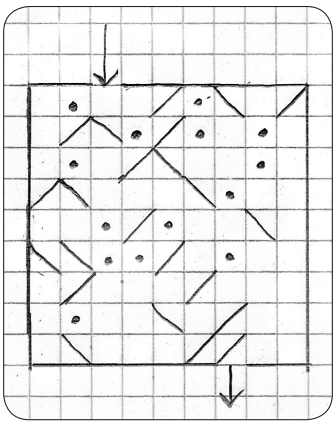
How Will I Approach This Problem?

Unconventional solution paths, even if they are less streamlined than standard methods, are highly valued in Arbor classrooms because they represent the student's willingness to tinker and explore and think both broadly and deeply about mathematics. Our math books regularly invite novel approaches—often by posing a new kind of problem before teaching the "conventional" method of reaching a solution—requiring students to extrapolate beyond what they have already learned. In teaching many important concepts, we lay out several possible strategies and ask students to decide which methods are most reliable for them. Since our Seniors work together in small groups, they are constantly exposed to the alternative approaches and ideas of peers. Differing solutions require collaborative review of the process that produced the answers, with each child making the case for his own approach or helping another to see what went wrong. Our books sometimes prompt them to write problems of their own and share them with classmates, so they may spend part of the class period exchanging and puzzling through these, laughing at their friends' creative twists while logging plenty of practice at extracting key information.



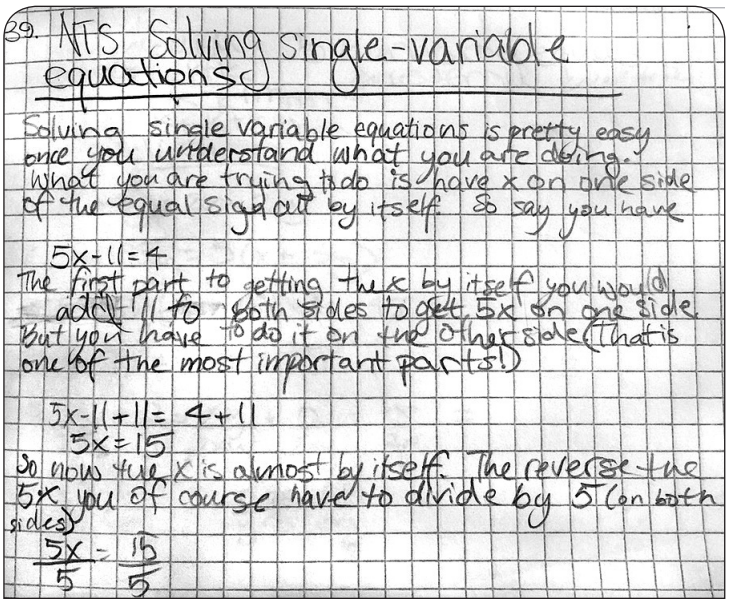
A simple proportion problem written by a student. The math doesn't have to be challenging to provide useful practice for peers; it isn't always easy to tell which information in a word problem is necessary—or whether enough information has been given to set up a soluble equation—and we hear good discussions in the working groups on this topic.

A related question, of course, is "How deep will I go?" and there is room for choice here as well. A particular topic may intrigue one student more than another, and there is opportunity for further exploration. For instance, early in the curriculum, students are introduced to the Four-Color Map theorem and asked to investigate it. Some children are satisfied that the theorem is correct after producing just a few maps of their own and testing a few of their fellows' maps, but others spend hours making and testing increasingly complex maps and even begin to grasp the notion of topological equivalence. One year we worked with a type of puzzle called a "laser maze;" a student produced dozens of her own laser mazes, one of which was featured in our *Crocodiles & Coconuts* textbook.



Izzy's laser maze from Crocodiles & Coconuts

Yet another related question is "How will I represent my thinking?" We always require documentation, but there are many ways to successfully and thoroughly record one's work. One of the areas in which we give students most freedom of choice is in "Notes to Self"—periodic encapsulations of understanding that are kept in a separate notebook from regular work. Those entries provide teachers with a very important window into that understanding. Notes to Self run the gamut from streamlined, annotated example problems to elaborate explanations, often enhanced by illustrations, analogies, and sometimes jokes.


39. AFS Solving Single-variable equations

Solving single variable equations is pretty easy once you understand what you are doing. What you are trying to do is have x on one side of the equal sign all by itself. So say you have

$5x-11=4$

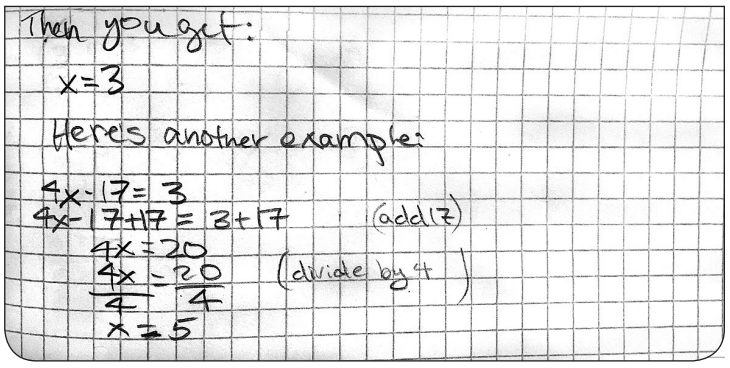
The first part to getting the x by itself you would add 11 to both sides to get 5x on one side. But you have to do it on the other side. (That is one of the most important parts!)

$5x-11+11=4+11$

$5x=15$

So now the x is almost by itself. The reverse of the 5x you of course have to divide by 5 (on both sides)

$\frac{5x}{5}=\frac{15}{5}$


Then you get:

$x=3$

Here's another example:

$4x-17=3$

$4x-17+17=3+17$ (add 17)

$4x=20$

$\frac{4x}{4}=\frac{20}{4}$ (divide by 4)

$x=5$

Sydney's Note to Self is a good example of thorough description with well-illustrated steps to a solution.

Constraints

While student choice is a cornerstone of our approach to teaching, we do not believe that it is the teacher's role to follow the whim of every student; rather the teacher helps to guide those choices and, indeed, sets limits on all of them. Teachers reserve the right to end a partnership that is truly unproductive (as a last resort, after working with the students to attempt to improve focus) or to insist that a partnership be tested, at least for a period of time. In addition, students are very rarely allowed to "fly solo" unless they are working to catch up with another group; we value collaboration—indeed we rely on it—too much to let a student work completely on his own. We constrain choices around pace, both by prodding students whom we believe could be setting themselves greater challenges and by reining in students who are moving too fast and skating along without achieving mastery. Although we honor idiomatic approaches, we do try to convince a student who has settled on a truly inefficient method to hone it or to accept a more efficient alternative. Exploration is important, and yet we would not have let Izzy spend the entire year doing nothing but making mazes. Conversely, we do not allow students to settle for shallow understandings. A Note to Self might be embellished with beautiful cartoon illustrations, but if it does not actually explain the concept under study, it will be sent back to the student with guidance for editing. Judgments of when to allow complete freedom of choice and when to put constraints in place are sometimes challenging to make, and they require thorough and ongoing assessment of student understanding through reading and responding to student work and through observing and working with kids in the classroom.

The one question that is taboo—around which there really is no choice—is "Will I do math?" We are firm in our belief that mathematics represents more than just a key set of skills to master, that it is not just a gateway to future academic success but also a valuable lens through which to view the world, a method of understanding that no student should be denied. We categorically oppose the notion that there are "math people" and "non-math people." Given, however, that students really are individuals, that they achieve mastery at different paces, that they are best served by different approaches to problem-solving, that their curiosity is fired by different particulars, we have found that providing the opportunity for student choice is one of the most reliable ways of ensuring that all students really can access the power and the beauty of mathematics.

CHOOSING EFFORT
PARTICIPATION & ATTITUDE IN P.E.

by Leigh Wood, Arbor P.E.

By the time students reach the Seniors, they know full well that participation in P.E. is not a choice: it is not recess, it is a class like any other. When they do not like a game or activity, they know that there is no question whether they will participate, but they do have a choice as to how they play. "Let's find a way" is my invitation not only to figure out how they will physically take part in the game but also what their attitude and effort will be. I am less concerned about the results they produce than I am that they try. Being able to pursue a new or challenging task effortfully is a life skill that will serve them more broadly than jumping far, running fast, or throwing well. So whether a new kindergartener needs a buddy with whom she can run around holding hands or the chance to be an It—to chase, rather than be chased—I am happy to find ways to accommodate a nervous player.

Capture the Flag (or in our adaptation, the pile of cones) teaches me a lot about the personalities of a new crop of kindergarteners.

As the students get older, choice is increasingly built into our activities. When the Intermediates play soccer, we have two games and the kids self-select into a competitive by-the-book game or a casual learning game. In the Seniors, when I have all 70 kids for class at once and a couple of teacher helpers, I tend to divide and conquer. A student once told me, "I like when we have a choice because even if you don't like any of the options, at least you can still pick which one you are most willing to play." So oftentimes, they have a choice of three activities: a traditional sport/field game, a running around game, and what I call a "game" game—one they probably played as youngers, more focused on silly or cooperative fun than competition. But not always. Sometimes I do a grade rotation and compel them to participate in a certain activity with a specific group of students. Other times the whole group plays one big game. And it turns out the students like each of those ways of organizing class.

The ultimate challenge when it comes to choice during P.E. arrives annually as we begin training for "the big track meet." Every spring another local private school hosts a track meet for which we spend about six weeks preparing. It takes place during school hours on a Friday, so our entire Senior class becomes our track team; unless a student is physically unable or will be out of town, each is expected to participate, and we train during P.E. periods. I require every child to sign up for at least one event, but because it is a meet with 15+ schools, the meet rules limit each athlete to four events. For some, it is all they can do to figure out anything to try, while others feel the upper limit seriously cramps their athletic style. The other complicating factor is that there are limits to how many athletes can sign up for each event, so there's no guarantee that a child who really wants to throw javelin will have a spot. For any event that is over-enrolled, we have a run-off, throw-off, or jump-off and take the top performers.

At Arbor, moments when we reward the best rather than all who put forth a best effort are few are far between. (Besides these track team selections, the others are try-outs for leading roles in the Senior play and places on our MathCounts team.) We avoid situations in which an individual succeeds at the expense of others; we teach that it's as worthy to be a fine stagehand as it is to shine as a leading lady, and that a smash performance can only be achieved by true ensemble effort. But the larger world doesn't always work this way, and our children do need to build resilience by tasting the sting of defeat and rallying to try again. So while embracing our normal best-effort philosophy, we wholeheartedly support the track meet as an opportunity for the kids to learn and grow. Because we take all our Seniors to the meet, I can emphasize to the Sixes that this is a three-year opportunity for learning events: just because you don't make a team this year doesn't mean you won't next year. (And vice versa! No one's spot is a given.) Work hard in the "off season" and try again. In particular, I remember a boy who, as a Six, was in tears when he didn't make our high jump team. But the next year he put forth his best effort and earned a place on the team. And as an Eight, he not only made the team but placed in the top three at the meet. We were proud of his strong performance but really delighted by his grit in working hard to improve his personal best.

Forming teams carries an element of teacher choice, too. As we practice the events, I'm constantly looking for evidence that my lessons in effort and willingness to find a way have struck home. Open-minded students who cast the net wide in trying new events demonstrate a flexible attitude that's bound to ensure them a spot on at least one of those teams. And those who truly impress me with their wholehearted devotion to learning an event may, in special cases, earn a spot regardless of results in the try-outs. For the sake of the meet, yes, we care about results, but ultimately it is effort that matters most to me.

Which leads us back to where we started: participation is not an option, but your attitude and effort are yours to choose. Will you step up to a new challenge and learn and grow in the process? Or will you lower your expectations for yourself? Will you find ways to have fun even if you don't get to play what you really wanted to play? Or will you withdraw and make clear to everyone that things didn't go your way? P.E. regularly poses these dilemmas, and fortunately most students choose to try hard and have fun.

Members of the seventh-grade relay team giving their best effort despite the wild weather

Thanks to Arbor parent Kaie Wellman for the track meet photographs.

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Scenes from Arbor: above, teacher and mentor Peter ffitch assists a boating expedition down Saum Creek, which flows through our campus. (Photo by ACT Apprentice Casey Dilg.) At left, ACT Apprentice Danielle Ito works with a small group of her Primary students.

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Cambium: (n) the cellular growth tissue of trees and other woody plants, from medieval Latin "change; exchange."

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Masthead by Arbor student Jake Grant, after an 1890 botanical illustration.

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