



Parent

LAKE ORION COMMUNITY SCHOOLS TEACHING AND LEARNING NEWSLETTER

2018/2019 ~ January



Dear Parents/Guardians, Partners in Education,

I hope you have had a great start to the 2019 year!

The district was very busy on January 21. During the day, all teachers participated in professional development in the morning at the High School. Teachers were able to choose two sessions relating to student social and emotional needs. In the afternoon, each school held its own professional development. In the evening, the district hosted our first Martin Luther King, Jr. celebration. There were a variety of performances and speakers both from the district and the community. This was a great event to bring our community together.

Thank you to those who have been participating in our Parent University events. We hope that you are finding the topics beneficial. These sessions are designed to provide parents with useful information and support on particular topics and issues related to their children.

Thank you for your continued support and collaboration as we strive to provide an exemplary education for all students.

Heidi Mercer

Heidi Mercer
Assistant Superintendent of Teaching and Learning



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**DRAGON
COUNTRY**

Science Department

Science Education: Using Phenomena and Storylines to Promote Understanding

The robust science education that Lake Orion Community School students receive is based on the new Michigan Science Standards. These new standards offer all students interactive science instruction that promotes analysis and interpretation of data, critical thinking, problem solving, and making connections across science disciplines. Two key instructional strategies teachers use to foster a deeper understanding of science in their students are the use of phenomena and instructional storylines.

In science education, a “phenomenon” is a natural event that “sets the stage” for learning. Throughout the unit of study, students work to explain the phenomenon by learning the science concepts behind it. Engaging phenomena are used at all grade levels, such as:

- The biggest pumpkin in Michigan weighs over 1,500 pounds (third grade)
- An invasive species invades a local ecosystem (middle school)
- A healthy child suddenly becomes critically ill with a drug-resistant infection (high school)



Storylines deliver a coherent sequence of lessons that help students make sense of scientific concepts. In the past, a teacher would teach a specific concept such as cells. After the lesson, the teacher might wrap up by telling her students why this concept is important. But for students, the importance of learning about cells had only to do with the quiz that was scheduled. Instructional storylines flip this model. When science teachers use an engaging phenomenon, student questions “drive” the learning process. For example, in order to figure out why the pumpkin grew so large, students are prompted to ask scientific questions. These questions then enable the teacher to determine the sequence that various lessons are taught.

Phenomena and Storylines allow students to engage in activities that mirror how working scientists make discoveries and how engineers design new technologies. Students read with a purpose, ask questions, carry out investigations, interpret data, design solutions to problems, and engage in argument from evidence. Science educators in Lake Orion Community Schools support students as they build and use science ideas to explain real phenomena and solve real problems.

For more information, right click on the link below to view the following webpage:

<http://www.nextgenstorylines.org/what-are-storylines/>

English Learner and English as a Second Language Departments

It's WIDA* ACCESS Season!

**World-class Instructional Design and Assessment*

All English learners in grades K–12 will take the WIDA ACCESS for English Learners between February 4 and March 22, 2019. WIDA ACCESS monitors a student's progress in learning academic English, is administered online, and assesses the four language domains of listening, reading, writing, and speaking. Test results are available in the summer and are provided to families and classroom teachers at the start of each school year. For more information on WIDA, right click [here](#). Thank you for encouraging your students to do their best on the WIDA ACCESS and for your support of the testing schedule.

LOCS Students Can Now Apply to Earn the Michigan Seal of Biliteracy

Michigan has joined approximately 30 states in recognizing bilingual students. The Michigan Seal of Biliteracy recognizes

students who are proficient in English and an additional language. Universities may consider the Seal of Biliteracy for placement in language courses, and the Seal of Biliteracy also indicates to employers that students are entering the workforce with proficiency in more than one language.

Students who meet the Lake Orion High School ELA graduation requirements and demonstrate proficiency in an additional language can now apply to earn the Michigan Seal of Biliteracy. Students can demonstrate proficiency by a rating of Intermediate High on an approved language assessment or a transcript verifying study in another country. Applications are available from the high school counseling office. Students who earn the Seal of Biliteracy will be recognized at a departmental awards ceremony and will receive a certificate from the State of Michigan and a gold seal for their diplomas.



English Learner and English as a Second Language Departments (cont.)

Tips for Raising a Bilingual Child

In “Raising a Truly Bilingual Child,” Perri Klass, M.D., provides insight into raising bilingual children. First and foremost, Klass affirms that early exposure to more than one language has many advantages including being able to correctly form the sounds of both languages. Klass also cautions that raising a bilingual child requires both exposure and effort.

Klass supports the recommendation of many pediatricians that parents should talk, sing, and read to their children as much as possible. Children need person-to-person exposure in both languages. Some other tips to support both languages include:

- Having each parent speak a different language to the child.
- Having each parent speak both languages to the child.
- Involving caretakers who speak a second language to the child.
- Speaking the native language with extended family.
- And/or sending the child to a “Saturday school” where the native language and target culture are emphasized.

Parents should be mindful that it takes longer to acquire two languages than it does to acquire one, and that a child’s mixing of languages does not indicate confusion. Encouraging a child to use and maintain both languages may not result in a perfect balance between languages, but knowing and being able to communicate in two languages is still an advantage and a gift to your child.

To read the entire article, click [here](#) to open hyperlink to the article.



The Importance of Reading at Home

Elementary-Aged Children

Children who are read to become better readers. When you read aloud to your child, you help him or her develop the skills necessary to become a successful reader. The more often you read, the better prepared your child is to learn to read. Reading aloud will help your emerging reader:

- learn letter names and sounds and understand that words are made up of different sounds.
- understand that printed words have meaning.
- learn new and less common words not typically used in everyday conversation.
- become familiar with new concepts and ideas, which increases background knowledge and leads to greater reading comprehension.
- learn about the printed page and that we read from left to right and top to bottom.
- develop comprehension skills.
- discover the pleasure of reading and develop into a life-long reader and learner.
- practice oral language skills as you talk about the books you read.

According to the National Center for Education Statistics (NCES), a division of the U.S. Department of Education, children who are read to at home enjoy a substantial advantage over children who are not.

Twenty-six percent of children who were read to three or four times in the last week by a family member recognized all letters of the alphabet. This is compared to 14 percent of children who were read to less frequently.

The NCES¹ also reported that children who were read to frequently are also more likely to:

count to 20, or higher than those who were not (60% vs. 44%)

write their own names (54% vs. 40%)

read or pretend to read (77% vs. 57%)

Read aloud as often as possible. To help make certain that you read at least once a day, set aside one particular time during the day to read -- after lunch or before bed, for example. Keep this time special and don't let other activities interfere with reading time. Read at other times, too, whenever you have the chance: while in the car waiting to pick up an older child, at the doctor's office, while traveling -- any time your child asks to read a book!

Pre-teen and Teenage Children

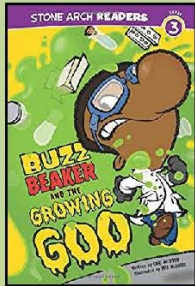
In middle and high school, social media and extracurriculars frequently replace time dedicated to reading for leisure. Although students may be reading books assigned for a particular class, it is unrealistic to think that those will always be the same books that your children would choose to read on their own for leisure. Instead, it is important to encourage students to discover books that appeal to them -- perhaps they are into sports-fiction or maybe they prefer historical non-fiction books. Regardless of genre, students of all ages need to read continuously.

Reading just 20 minutes each day can have a profound impact on one's vocabulary:

Student "A" reads 20 minutes each	Student "B" reads 5 minutes each day	Student "C" reads 1 minute each day
3600 minutes during the school year	900 minutes in a school year	180 minutes in a school year
1,800,000 words	282,000 words	8,000 words
Will likely score better than 90% of their peers on stand- ardized tests	Will likely score better than 50% of their peers on stand- ardized tests	Will likely score better than 10% of their peers on standardized tests

(source: readdbq.org/2014/11/19/read-20-minutes-day)

From our bookshelf to yours...

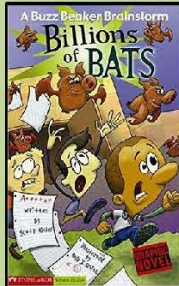


Buzz Beaker

By Scott Nickel

Level IJ

This child inventor is constantly getting in to science-based disasters.

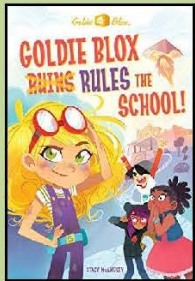


Buzz Beaker Brainstorm

By Scott Nickel

Level KLM

Buzz Beaker Brainstorm books continue the adventures of crazy kid scientist, Buzz Beaker, but are written as graphic novels!

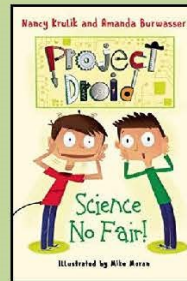


Goldie Blox

By Stacy McAnully

Level NOPQ

Every book has an interesting problem with a cool scientific solution!

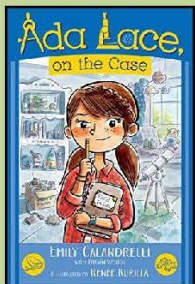


Project Droid

Nancy Krulik

Level NOPQ

An inventor mom builds her son a robot cousin as a playmate!

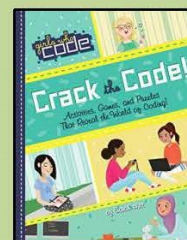


Ada Lace

By Emily Calandrelli

Level RST

Ada is an 8-year-old who loves math and science. Every problem is solved with technology!

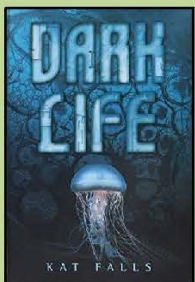


Girls Who Code

By Reshma Saujani

Level RST

This series is like a Babysitter's Club for who kids who love computer science.



Dark Life

By Kat Falls

Level UVW

Explores climatology and marine biology while following a gripping story of undersea pioneers.

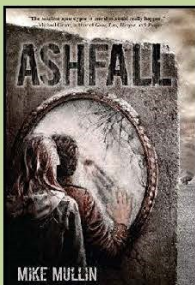


The Testing

By Joelle Charbonneau

Level XYZ

A post-apocalyptic tale that follows a girl whose life hinges on a test. It covers botany, green technology and orienteering.



Ashfall Trilogy

By Mike Mullin

Level Young Adult

After a super-volcano erupts, a boy fights to find his family while exploring physics, engineering and food science.

Math Department

Steps to Increase Your Child's Math Achievement and Make Math Fun

Appropriate Strategies for K–8th Grade

Jo Boaler (PhD), Stanford University

Parents and guardians have incredible opportunities to shape their children's mathematical futures. At times, it may not seem that this is the case, especially when children are going through bad experiences at school. I know, as both as a professor of mathematics education and a mother of two children, that you have the opportunity to make a huge difference in children's mathematical lives.

One of the most important contributions you can make is to dispel the idea that only some children can be successful at math, or that math is some sort of a "gift" that some children have and some do not. This idea permeates American (and other) societies but it has been completely disproved by the science of the brain and learning. The idea that some children can do well in math and some cannot is a damaging myth that is harmful to children's mathematical development. Everyone can achieve at the highest levels of math in school, if given the right opportunities and support.

Some ideas for you as you work with your child:

1. *Never praise children by telling them they are "smart."* This may seem encouraging but it is a fixed ability message that is damaging. When children are told they are "smart," they often feel good, but later when they fail in some situation, as everyone does, they think, "Hmm, I am not so smart." Always praise what children have done, instead of the person e.g. "It is wonderful that you have learned how to add numbers", not "Wow, you can add numbers, you are so smart." When children know that learning and hard work make them achieve at the highest levels, their achievement takes off. This idea can be hard to get across to children because TV programs for middle grade children constantly communicate the opposite message that some children are "smart" and some are not. They communicate many other damaging ideas too – that math is hard, and it is only for "nerds." It is critical to reject these ideas as often and as loudly as you can. Instead, keep telling your children that math is very exciting, and it is important to work hard, as it is hard work that leads to high achievement.

2. *Never share stories of math failure or even dislike.* Research has shown that as soon as mothers say to their daughters: "I wasn't good at math in school," their daughter's achievement went down. Even if you have to put on your best acting skills, always seem happy – even thrilled when you see math. When my children get home, I eagerly ask them if they have any math homework and if they do I say, "Hooray, can I do it with you?" This sometimes requires some acting on my part. Like many parents, I often dread math homework – it can be very stressful for children to be faced with pages of questions at the end of a long day. Whatever the math homework looks like, be excited about it. Do not worry if you cannot do your children's homework. Ask them to explain it to you. This can be one of the most encouraging experiences a parent can give their child. I often tell my own children that I don't know how to do the work they are doing, even if I do, as when they are explaining it to me, they are learning it at a much deeper level. It makes them very happy.

3. *Always praise mistakes and say that you are pleased that your child is making them.* Recent research has shown that our brains grow the most when we make mistakes. Scientists have found that when people make a mistake in math synapses spark, and there is activity in the brain that is absent when people get work correct. What this means is that we want people to make mistakes. In fact, making mistakes in math is the most useful thing we can do. But many children (and adults too) hate to make mistakes. They think it means they are not a "math person." It is important to both celebrate mistakes and tell children their brain is growing when they make them. My 10 year old recently worked on 2 math problems and got one right and one wrong. When she got one wrong she reacted really badly saying "I can't do math" and other negative things. I said to her – "do you know what just happened? – when you got that question right, nothing happened in your brain, but when you got that question wrong, your brain grew." I give this message to my children every time they are confused, are struggling or they make a mistake, and these are the most important times in their learning.

Stay tuned, more ways to "Make Math Fun and Increase Fun Achievement." Coming next Parent Newsletter!

Top Consumer Math Skills After High School

Whether students head off to college or begin a career after high school, there are several essential mathematics concepts that are used in daily life. If young adults have a basic understanding of real world consumer math, it will ensure that students are prepared for their future.

(The following are topics that may or may not be part of a mathematics course in school.) There are several resources throughout this article to help students through these topics.



Budgeting Money

In order to avoid large amounts of debt, students need to understand how to set up a **monthly** budget that they can follow. At some point after graduation, students will move out on their own. They will need to understand that out of any money they earn, required bills come out first, like phone payments, car payments, rent, etc. After those essentials is budgeting for food, both groceries and eating out. Depending on how much income they have at the time, what is left should be for savings but most often is used for entertainment. A common mistake for newly independent individuals is to spend their entire paycheck without considering what bills are due before the next one.

Click here to download the XLS file [free budget template.xls](https://www.mathgames.com/skill/6.73-unit-prices-which-is-the-better-buy).

Spending Money

Another skill that many students need to understand is how to make **educated** spending choices. Comparison shopping can work well if students have choices to shop. Working the math to find the unit rate can help determine whether the 12 pack of sodas or the 2-liters are a more economical choice? When is the best time to buy different products? Are coupons worth it? Determining a tip at a restaurant and sale cost of an item in their heads are learned skills that rely on a basic understanding of mathematics and a dose of common sense.

Which is the better buy? - game <https://www.mathgames.com/skill/6.73-unit-prices-which-is-the-better-buy>

Using Credit

Credit can be a great or a terrible thing. It can also lead to heartbreak and bankruptcy. The proper understanding and use of credit is a key skill that students need to master. The basic idea of how APR's work is an essential fact that students need to learn.

How credit card payments work <https://www.ngpf.org/curriculum/types-of-credit/activities/>

Investing/Saving Money

According to the National Foundation for Credit Counseling, 64 percent of Americans do not have enough money in savings to cover a \$1,000 financial emergency. Students need to be taught the importance of regular savings. Students should also have an understanding of simple versus compound interest. An understanding of different accounts at the bank for savings and investing can help students begin a small savings.

Paying Taxes

Taxes are a reality that students need to grasp. When they get their first job and look at their salary, understanding that you don't actually get that amount can be shocking if they don't understand income taxes. Depending on the city, they also need to learn how local, state, and national taxes all interact and affect the student's bottom line.

How much do I pay in taxes? <https://www.ngpf.org/curriculum/taxes/activities/>

Understanding Insurance

Students will be faced with buying different insurances such as auto, renter's, and health insurance after they no longer qualify as a dependent. Eventually life insurance and home insurance will be a priority. Students will be faced with buying one or more of these soon after leaving school. Understanding how they work is important. They should learn about the costs and benefits of insurance. They should also understand the best ways to shop for insurance that truly protects their interests.

Insurance activities – <https://www.ngpf.org/curriculum/insurance/activities/>



PARENT UNIVERSITY

Lake Orion Community Schools Parent University presented on the following topics in January:

- Is my student on the right math track? (January 15, 2019)
- What science courses should my high school student take? (January 15, 2019)
- Angst Movie (January 22, 2019)

If you were unable to attend, right click [here](#) to open hyperlink that will access the presentation or handout materials.

Mindfulness

What Is Mindfulness and Why is it Important?

Mindfulness is a term that is quite popular right now. It is the topic of many podcasts, articles, webinars, and professional development opportunities. We are told to be mindful of where we step, be mindful of what you say, but what does it really mean to be “mindful”? Mindfulness means paying attention in a particular way: on purpose, in the present moment, and without judgment. This is the definition of Mindfulness according to Jon Kabat-Zinn, the founder of Mindfulness Based Stress Reduction or MBSR. There are many variations of this definition depending on the source; the bottom line is that you are paying attention, right now, on purpose. Mindfulness also includes the intentional nurturing of positive states of mind such as empathy and kindness. Solid scientific and anecdotal evidence suggests that mindfulness improves attention, self-control, emotional resilience, adaptability, and gives us an overall sense of well-being. Most importantly, mindfulness reminds us that we are human beings rather than human-doers. Studies in education have found that learning mindfulness benefits students in terms of improved attention, emotional regulation, behavior, empathy and understanding of others, social skills, test anxiety, and stress. Mindfulness allows for a pause during which thoughtful responses can replace impulsive reactions.

A great way to get started on your own mindfulness journey or to guide a willing child is to download a Mindfulness App! Insight Timer and Smiling Mind are free and have many resources to educate the beginner and satisfy the more experienced user. Other apps that are worth looking into but do require a subscription are Headspace, Calm, and Simple Habit. There are also many books worth reading on this subject as well. For the adult, *Full Catastrophe Living*, by Jon Kabat-Zinn. For working with children, *The Mindful Child*, by Susan Kaiser Greenland.

Mindfulness Quick Tools:

- When you are noticing stress, anxiety, or you just need to reset, focus on your breathing.
- Stop and notice the sounds around you for 30 seconds without labeling them.
- Make a point to recognize what you are grateful for throughout your day.
- Do a simple, everyday task consciously, noticing every aspect of the experience without judgment.

Special Education Department



1. Regular Time: It is important for you to set up a regular study time for your student and to try and be strict about maintaining it. This will help your child establish a routine for studying, which is a key to good homework habits. Routines develop into good habits, and if you help your child stick to this routine, you will soon notice that he/she automatically uses that time as study time. You could use an alarm clock, oven timer, etc. to remind when study time begins or ends (Braithwaite). Also, if your child is often done with his/her schoolwork, try to make this a regular time to read together or work on basic skills like math.



2. Regular Place: Having a regular place to study will also help you and your child establish a routine for good study habits. Probably the most important thing to keep in mind when choosing a study spot is to keep it away from distractions, like the television. Another idea to consider is it is probably best not to do it actually on the bed. Since the bed is a place for sleeping, doing homework there could interfere with your child's sleeping routine.



3. Regular Procedure: Establish a regular procedure for your child to follow during study time. This could look like the one below. Different schedules and practices work well with different students depending on their strengths, interests, age, etc. Create a study time that works well for your individual child. Some guidelines and a sample plan:

10 minutes– Do something together with your child: read a book, do a puzzle, etc. If possible, allow him/her to choose the activity. Try some games he/she learned at school and don't be afraid to make up games of your own. Enjoy this time together.

5 minutes– If your student has a particular homework assignment begin by pre-reading the assignment and/or reading the directions. Talk about what the main ideas of the homework seem to be, based on this pre-reading. Kids Can Learn, Inc. suggests that you guide the homework tasks with a series of simple direct questions:

- What is the assignment?
- What is the problem to be worked out?
- How can we/you figure out the answer?
- What do you have to do first?
- Do you want me to listen (to reading)?
- Do you want me to read what you have written?
- Do you want me to check your knowledge (for example, in spelling)?



(Kids Can Learn! www.kidscanlearn.com)

Special Education Department (cont.)

10–15 minutes– Do the assignment, reading, etc. If your child has a difficult assignment, do the assignment together, using the above questions as a guide. If your child seems to have grasped the assignment and has a good idea of how to approach it, go ahead and let him/her do it alone. To help develop independence, encourage your child to use some sort of mark, like a question mark, to identify problem areas for you to go over together.

5 minutes– Break/Study Snacks-- Brain research has discovered connections between what we eat and how we learn. The following information was taken from an article by Deborah Joy Braithwaite featured at www.family.disney.com: Getting a child into good eating habits during homework sessions is essential. Fast foods, snack bars and carbonated drinks are full of taste enhancers, artificial colorings, caffeine, salt, saturated fats and refined sugars. They do provide a quick burst of energy; however, it is a false energy boost and is quickly followed by lethargy. Children seem to be natural nibblers and like to eat small amounts of food often. Nibbling the right food every 90 minutes keeps the blood sugar high to energize the brain for thinking and learning. During a study session, fill them up on fruit and raw vegetables (an apple or banana, slice of cheese, handful of peanuts, carrots, or celery.) Raw foods of any sort increase the rate at which the brain cells use oxygen, so that thinking and learning is easier and better. There is an abundance of evidence in medicine, education and sport to show that drinking plenty of water is essential for optimal performance. The message is ‘if you don’t drink enough, you can’t always think enough!’”



10 minutes – Review the completed assignment/reading with the child. Work on any problem areas, again asking questions that encourage him/her to find the answer on his/her own. For every mistake that you point out, try to point out two successes. In the Kids Can Learn! Article, the writer offers this suggestion:

‘Help your child believe in his or her ability to succeed. When you praise work completed successfully, you are showing your child that he or she can do well in school. Success builds confidence. This can be achieved in many ways, for example, if you write a word such as when and your child reads it as what, don’t say “wrong.” Instead, say the word aloud and ask your child to repeat it after you. After the word is repeated, praise your child and move on.’

Talk about how the assignment/reading/activity, etc. went that night. Note things the child had success with and are as that are still a problem. It may be helpful for the two of you to keep a journal noting what you discuss each night and comparing this to similar assignments in the future.



Finally, as a last, a five-minute task for yourself and/or with your child, work on writing a note at least once a week to the teacher. Was there something from the assignment that you didn’t understand? Were the directions unclear to you? Did you feel the assignment somehow didn’t achieve what it was supposed to? Instead of feeling frustrated, especially when you first start this study process, communicate your frustrations with the teacher. Did you feel this assignment was especially effective? Would you like more assignments like this to work on with your student? Communicate these ideas as well with the teacher.

<https://www.nd.gov/dpi/uploads/1311/guide.pdf>