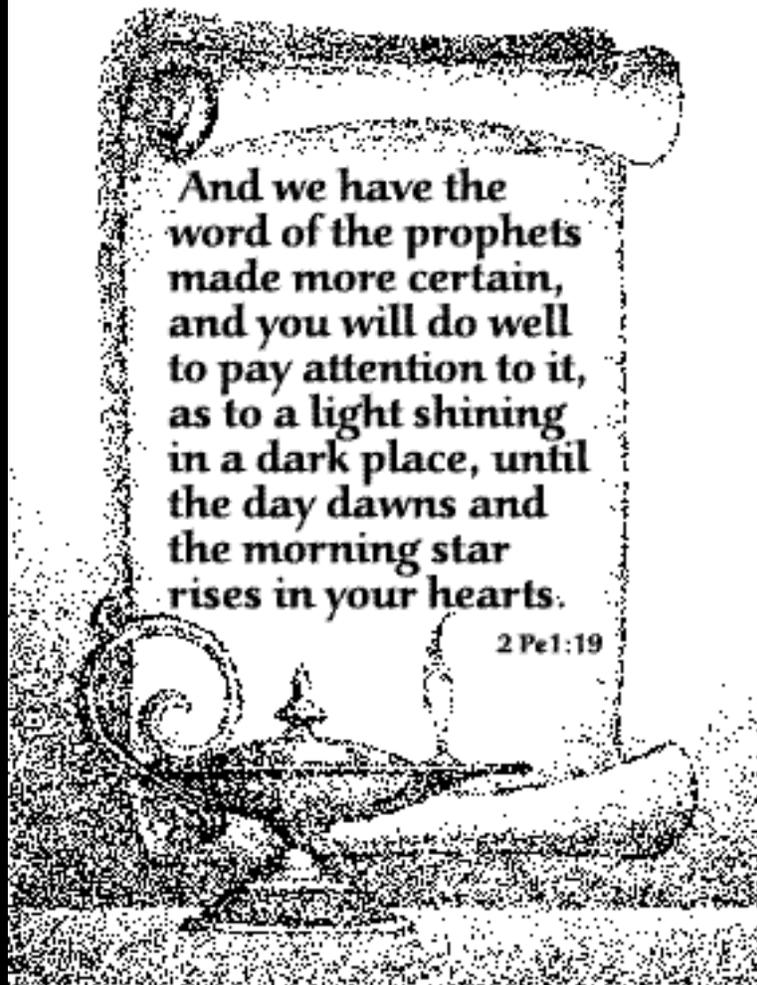


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The Lutheran Educator

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The Lutheran Educator

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of the Wisconsin Evangelical Lutheran Synod
edited by faculty of Martin Luther College

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Editorial Board — Philip M. Leyrer, Cheryl A. Loomis, James F. Pope, David D. Sellnow

Editorial correspondence and articles should be sent to *The Lutheran Educator*, Editor, Martin Luther College, 1995 Luther Court, New Ulm, MN 56073. Phone 507-354-8221. Fax 507-354-8225. e-mail: lutheraneducator@mlc-wels.edu

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Teaching a Love for Souls

The sign over the classroom door encouraged students' eagerness: "Enter with an open mind." When students exit our classrooms later, we don't want their thinking to be narrow or restricted then either. Our goal in education—including Christian education—is not to close students' minds or hearts, but to expand and enrich them.

Christian schools will seek to open children's hearts to the wide variety of people in their world—people for whom Christ died and rose again. Christian education ought not cause our young people to close themselves off from the world around them, but rather prepare them to live in that world and impact the world with godliness and faith. We want them to become seasoned to serve as the salt of the earth, enlightened to give off light to the world.

It is an unhappy consequence if our educational system becomes insular and teaches children to stay to themselves. God tells us to avoid conforming to the ways of the world, but he does not tell us to avoid the world. We teach our children to be wary of temptations and to steer clear of false teachings, but at the same time we train them to be models and messengers to others in their neighborhoods and communities.

When kids learn about the religious beliefs of others—whether those of other denominations or of various cults or of world religions—they may go home and tell their parents, "Do you know what _____ believe? They're really weird!" Teachers and parents will seek to inculcate an alternate outlook: These are people whose lives are immensely valuable, who will stand before the Lord on the day of judgment just as we will. We pray for them. We seek to share truth with them. We go out of our way to proclaim Christ to them.

The apostle Paul exemplified a Christian's burning love for lost souls, taking the gospel to as many places as possible. For his own countrymen, who did not share his belief in Jesus as the Christ, his yearning for their eternal well-being was palpable: "I have great sorrow and unceasing anguish in my heart. For I could wish that I myself were cursed and cut off from Christ for the sake of my brothers, those of my own race, the people of Israel" (Romans 9:1-4). He longed for their salvation.

Our Christian schools exist as training grounds in which our children learn the truths of the faith and godly principles for their own lives. But they are also more than this; they shape our children's attitudes toward people in the world. Our own attitudes as teachers will rub off on our students. "So from now on we regard no one from a worldly point of view" (2 Corinthians 5:16), but see all as persons who need Christ. We see ourselves—and teach our children to see themselves—as ambassadors for Christ, imploring others on Christ's behalf to be reconciled to God.

DDS



The Living Hope of Heaven

John R. Schultz

Praise be to the God and Father of our Lord Jesus Christ! In his great mercy he has given us new birth into a living hope through the resurrection of Jesus Christ from the dead, and into an inheritance that can never perish, spoil or fade kept in heaven for you. 1 Peter 1:3-4

“I hope for a quiet, restful summer.” After a long, often stress-filled school year, principals and teachers can be forgiven for having such a hope. But it really is wishful thinking. We commonly use the word hope to express a wish for something. In the Bible, however, hope is not wishful thinking but a firm faith toward something in the future. Like saving faith, such hope is God-given. The resurrection of Jesus from the dead gives believers a new birth into a hope that they will be resurrected just as he was. Believers are born again not only to a hope but also to the object of that hope, an inheritance in heaven. Praise God that he has given us such wonderful hope!

The Bible seems strangely silent about heaven. To be sure, we have brief glimpses in the Book of Revelation by means of pictures and symbols: a city with jeweled walls, gates of pearl, golden streets. Jesus referred to heaven as the

Father’s house of many mansions prepared for us. We are told that sad earthly experiences are absent in heaven: no more mourning, no more pain, no death, no more tears. But yet, heaven seems a mystery. It’s almost as if God has purposely kept it his best-kept secret.

From 2 Corinthians 12 we learn that the Apostle Paul was permitted to see heaven. He “was caught up to paradise” where he experienced the beauty and joys of heaven. Yet, Paul was prevented from describing for us what he saw and heard. These things were “inexpressible.” It is interesting to note that he was so moved by what he saw that he spoke of it in his epistle 14 years later with a sense of awe and wonder.

Perhaps God isn’t really being silent about heaven at all. He is telling us that heaven is so wonderful and glorious that our minds are too limited, our vocabulary too inadequate to understand and describe heaven. As sinful humans, we just can’t fully fathom it. “No eye has seen, no ear has heard, no mind has conceived what God has prepared for those who love him,” 1 Corinthians 2:9. You think you’ve seen beautiful places down here on earth?

You haven't seen anything yet! You think you've heard beautiful sounds in this life? Just wait to hear the awesome refrains that will fill heaven! You think your mind can clearly picture heaven? Our mind can't even begin to imagine the wonders of that place!

What the Bible clearly tells us, and our Spirit-washed minds gratefully comprehend, is the most comforting fact that in heaven we will be in the presence of Jesus Christ, our Lord and Savior. Jesus prayed, "Father, I want those you have given me to be with me where I am, and to see my glory, the glory you have given me because you loved me before the creation of the

world" (John 17:24). To be forever with Jesus, our dearest Friend, that is our living hope! Share that hope with your faculty, students, parents, community, and world.

Read some more: Philippians 3:17-21
Dear Heavenly Father, we are amazed by your love for us through your Son, Jesus Christ. We long for the day when we will see you face to face. Until then, let us serve you faithfully here on earth, motivated by your awesome love. Amen.

John Schultz served as principal/administrator of Minnesota Valley Lutheran High School. He is currently retired and living in New Ulm, Minnesota.

Recently, two excellent published materials have been made available on CDs.

In 1992 Carl Hochmuth wrote and compiled a large set of materials that could be used in schools and congregations to teach and practice evangelism. He called it the *Evangelism Handbook for Schools* and it was printed and sold by the Commission on Parish Schools. Mr. Hochmuth has now added new material, thirty-seven activities or resources and a Powerpoint presentation, and put it all into pdf (Adobe Acrobat) and Microsoft Word format. This set of materials has been burned onto a CD. If you would like more information, contact Carl at Luther Preparatory School, 1300 Western Avenue, Watertown, WI 53094.

In 1997 Paul Boehlke, Roger Klockziem, and John Paulsen, working with science teachers, compiled a set of 150 hands-on science experiments and activities, taught from a scriptural viewpoint, for elementary and high school students. This

book, *Discovering God's Creation*, has also been put into pdf format and burned onto a CD. The college is still working out the details, but if you want further information, contact Roger Klockziem at Martin Luther College, 1995 Luther Court, New Ulm, MN 56073.



Where Experiments End

Paul L. Willems

I LIKE EXPERIMENTING. When I was nine or ten I heard cats always land on their feet. I decided to see if that were really true. I experimented with my neighbor's cat. I held her upside down and dropped her. She landed on her feet. I dropped her from greater and greater heights. She landed on her feet. I finally threw her into the air as high as I could. She bounced and lay still. I thought she was dead, but she was only unconscious. She had not landed on her feet that time. My experiment taught me not to take everything that people say as true. In sixth grade my teacher said water expands when it freezes. I found that hard to believe. The wires on the power lines near my house were shorter in winter than in summer, not longer. They did not expand when cooled. One evening in late November I filled a vinegar bottle to the brim with water and screwed the cap on tight. I placed it outside our house under my dad's mortar box so no one would "spoil" my experiment. Early the next morning I went to look at the vinegar bottle. It had shattered as the water cooled and formed a pattern of the vinegar bottle when it froze and

expanded. Many people like to experiment and to investigate the world in which we live.

My cousin, Roy, had a chemistry laboratory in his basement complete with a sink and a siphon for running water. He was an experimenter. A friend who liked to paint experimented with a scratching technique using acrylic paints. He painted his canvas with green and yellow-green paint, then over painted them with brown. When he scratched through the brown paint with a steel comb the green and yellow-green colors appeared. By manipulating the comb the scratches became the blades of grass in his painting. Poets experiment with words to create a picture within our minds. Beethoven was deaf during the last twenty years of his life, but he continued to experiment with notes and produced a symphony we still enjoy today. We like experimenting to "discover" new things. It's fun! It is human to experiment. Roger Bacon (1214-1294) wrote down the steps of human investigation which included observation, hypothesis, experiment, and theory which we call the scientific method today. Humans experiment. Humans are filled with curiosity. We

want to know about this wonderful universe God made for us. The very word science means “to know.” We could say science is a human effort to get to know God’s universe better. There is an artistry about the way in which we experiment. I was not satisfied with one trial when investigating the cat’s ability to land on her feet. I pushed my experiment to cruelty. I was not satisfied to take my teacher’s word for the fact that water expanded when it froze. I had to break a bottle to satisfy my curiosity. Human experiments are often trial and error. They are the many attempts to understand what is unknown. Writing poetry or music and painting may require many attempts and errors before we are satisfied with the results. Other people may try to duplicate our experiments. They may even come up with new experiments or better ideas than we. Nobel prizes worth millions of dollars are awarded each year for medical advances, new ideas in physics and chemistry, and also for literature and peace.

God is not an experimenter. God does not need to investigate what he has created. He really knows. When God created the universe he did not tinker. He made everything we see about us in just six days. He had a definite purpose in mind. He did not “experiment” with this or that type of animal or land form. He knew what he wanted and it was accomplished. He said it was very good (Genesis 1:31). After humans fell into sin, God devised a plan to redeem us by sending his Son into the world. He did not try several other ideas first. The

Holy Spirit brings us to faith. He works faith and goodness within our hearts through his Word and the sacraments. He did not make several attempts at sanctification to first see how they would work. God is not an experimenter.

The Bible is our canon, or rule for doctrine. Some liberal theologians try to tell us that this book is the result of many “experiments” over the years. They would have us believe the Bible is only literature or a gathering of human thoughts or even a collection of fables. This is not true. The Bible is God’s Word (1 Peter 1:21). “The Scripture cannot be broken” (John 10:35). It was not written as a part of some divine experiment. When the Dead Sea Scrolls were discovered these same liberal Bible scholars thought they would be able to show believers how much the Bible had changed over the thousand years between the oldest Hebrew manuscripts and the Dead Sea Scrolls of about 250 BC. It was discovered there are no doctrinal differences during this long interval. God’s word is not an experiment because God is not an experimenter. He does not change. “Jesus Christ is the same yesterday, today and forever” (Hebrews 13:8). He is not experimenting. Humans experiment. God does not.

I believe teachers should keep this distinction in mind as we instruct Jesus’ lambs in the truths of God’s Word and in the science of our modern age. Yes, science is wonderful. Medical wonders saved the lives of two of my children. Science is a way humans can use logic to solve puzzling difficulties. Science is a

Willems

gift of God. Communication technology, transportation devices, medicines, synthetic fibers, and other blessings from God through science enable us to live the complex and bountiful lives we do today. Our lives have changed from the ways our fathers lived their lives. However, God's Word does not change. He still loves us as he did before the creation of the world. He continues to save us through the foolishness of preaching Christ crucified (1 Corinthians 1:23). These clear gospel teachings found in Scripture do not change. God is not an experimenter. We should not act as though he were.

We must keep separate the divine and the human. We must guard against combining science with doctrine. It is a mistake to use the logic of science to defend our faith. Using human reason in predestination makes God a liar when he says he wants all to be saved (1 Timothy 2:4). We must be always wary of changing science. The scientific "truths" of today will become the foolishness of tomorrow. At a Lutheran teachers conference some years ago a teacher said he believed what God created on the first day, light, was really the spectrum of electromagnetic waves of which visible light is only a small "octave." Another wiser teacher said we cannot ascribe our science to explain Scripture. Science is not a tool of the gospel ministry of the church. Today science does not even speak of light using the wave model. It describes light as particles called photons. What now of God's creation on the first day? He still created light. We really don't know what light is,

but when we claim our science can explain Scripture, we are soon in trouble. Luther accepted the science of a stationary earth, but was not foolish enough to incorporate it into theology. Job failed at understanding science to answer God's questions about wind, rain, hail, and lightning (Job 38:22-25). However, Job knew his Redeemer lived. He knew he was saved. These men kept science and Scripture separate. So should we. We must not attach God's name to our favorite scientific theories. We do not know God's science. If science is only the attempts of humans to understand God's creation there can be no true science. To attach God's name to any science dishonors God's name (Ezekiel 43:8).

Science and Scripture are in two different spheres. If we try to unite them we will always have to reinterpret God's unchangeable Word to match the ever-changing theories of science. God reveals himself in the Bible. Study his Word. God is not an experimenter. His wisdom is far above human wisdom. His thoughts are the standard by which humans are measured. Human reason is not the standard by which we measure God. If we try to do this, we discard Scripture and seek in vain for a reasonable theology; one without original sin, without a Triune God, and without the grace of Jesus Christ found in his cross.

✠

*Paul Willems teaches at Minnesota Valley
Lutheran High School, New Ulm, Minnesota.*

Lindamood-Bell Reading Therapies

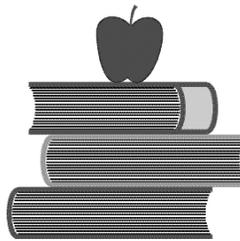
Sandra Whited

ONE CHILD can read through the story without making hardly any errors, but can't tell you what happened to the character in that story. The second child listens to the story and knows the answers to any questions you ask orally about the story, but can't read the story or the questions written on the test by him or herself. Yet a third child understands and can read most of the story, and can figure out what the questions ask on the test, but she can't spell and write her answers correctly for anyone to understand. All three children have reading and writing concerns that hamper them from achieving their full potential. It's because of these concerns that this reading program came about.

Background

Lindamood-Bell is an organization founded in 1986 by Nanci Bell, Patricia Lindamood, and Phyllis Lindamood, the authors of critically acclaimed programs that teach children and adults to read, spell, comprehend, and express language.¹

Lindamood-Bell's programs stimulate



basic sensory functions related to learning and are based on educational research in the fields of psychology, speech pathology, behavioral statistics, neurology, linguistics, and physiology.²

Once just one center, there are now 40 Lindamood-Bell Learning Centers nationwide and one in London, England. Due to the interest of fellow educators in rural Minnesota, the Lindamood-Bell Association approved third-party workshops to train area educators in the Lindamood-Bell techniques. Third-party training was held to learn the techniques for three programs: Lindamood Phoneme Sequencing (LiPS), Visualizing & Verbalizing for Language Comprehension and Thinking (V/V), and Seeing Stars: Symbol Imagery for Phonemic Awareness, Sight Words, and Spelling.

The Lindamood-Bell Association has since offered School Services including workshops and conferences. If you would like more information on those School Services visit www.lindamood-bell.com/about.shtml. Third-party training in the Lindamood-Bell techniques still occurs in rural Minnesota. Please

Whited

contact me if interested in information from the third-party trainer.

How do the three reading programs work?

It is estimated that up to 20% of the students per grade level will benefit from Lindamood-Bell learning programs. The whole focus of the program is to change the current paths of the brain and create new paths using feeling, visualization, and other tactile methods in a unique, sequential system. The therapy and its training are very intense and

The whole focus of the program is to change the current paths of the brain.

require concentration on the part of the teacher and the students.

Remedially, the techniques work ideally with a one-to-one student-to-teacher ratio, having no more than three students to one teacher. Lindamood-Bell techniques and vocabulary can also be part of the classroom language arts curriculum.

With the first program, LiPS, the focus is on phonemes in a word for fluent decoding and encoding to “crack the reading code.” Students learn all the phonemes and how to discriminate them, and then how to manipulate

phonemes in imaginary words. Imaginary words are not recorded or rehearsed by one’s brain. The second child in the opening scenario would benefit from this therapy.

In the V/V program, visualization and verbalizing the Gestalt of the story is taught. Students gradually learn how to create a “movie image” in their mind as they read. The first child in the opening scenario would benefit from this therapy.

Third, Seeing Stars focuses on letter symbol imagery and the concept of sight words. Here students are taught to hold letters in their mind to form words, change the order of the letters to make new words, or spell words backwards. In the scenario, both child two and child three would benefit from this therapy. In fact, the third child might well benefit from both LiPS and Seeing Stars which are often done simultaneously.

How Lindamood-Bell is used locally

First, a teacher or parent observes some form of reading or writing need that concerns him or her. Parents and teachers normally discuss these concerns. A checklist is used for teachers to look for areas that a child struggles with. These checklist areas include sounding out a word from left to right, spelling a word, repeating a story in order, and reading beginnings and endings of words. Then the child can be screened to see what areas of reading are strongest and weakest for him or her. Testing should be administered by trained Lindamood-Bell staff. Testing includes aptitude tests

and other informal testing such as the Lindamood LAC test. The testing data is gathered, recorded, and analyzed in the areas of reading, phonemic awareness, spelling, imagery, reading comprehension, and listening comprehension.

Based on the testing data, staff can see what weaker areas a child has and what therapy would help the child the best. Then there are many steps to organize a Lindamood-Bell pull-out remedial program, like the one used in the school district. Student data needs to be looked at to determine learning groups. Schedules are developed with the Lindamood staff, children, and the teachers.

Students start the program and progress through it based on their individual needs. Some students can complete the program in one year, and others take much longer. Some students complete one therapy such as LiPS and then need to move through another program such as V/V.

Besides having a pull-out program, some teachers in the district are trained in Lindamood-Bell techniques. The teachers can use the vocabulary and techniques in the whole classroom. Informal assessments can be done, if needed, to see the weaker areas in the classroom. If the whole class struggles with comprehension, then the teacher could use some V/V techniques with all the students.

Some parents have also privately paid for Lindamood-Bell therapy through

the trained staff, but separate from the school district time.

Effects

Teacher training can take up to seven days, depending on what programs you train in. The training is intense, and a person needs to be able to have that skill herself in order to teach it. It can be difficult to organize and schedule

remedial programs. There are, of course, dollar figures to consider, especially if you paid for the training directly from the Lindamood-Bell association. Teachers can

have difficulty integrating Lindamood-Bell techniques with the rest of the curriculum.

Statistics are kept annually to show progress of students' learning as they work through therapy. One statistic that continues to show up is that students gain skills in comprehension even when the student is just working on the phonemic therapy. The correlation is phenomenal!

Parents have commented to me that they are open enrolling their child in this district due to the Lindamood-Bell that the child receives here. Students themselves say such things as: "I wish someone would have told me this sooner... in first grade" as he finally learned a spelling rule, or "I love to read now. I actually know all the words on the page." Or "Now I know what you mean. I can see it in my mind."



Whited

Staff come running up to me saying, “I used the word popper, and as soon as I said that, George could spell that word.” or “You can’t believe what four syllable word Jane attacked today.” Lindamood-Bell staff members tell me of letters received from students who have since gone on to high school but want to tell them thanks for all their reading help. It’s these testimonials that prove to me that Lindamood-Bell works.

I have used this therapy and seen it work on a first grader with a substantial speech impediment. At first, the only sound he could make was ‘sss’ and the only letter he wrote was ‘x’. I used this therapy with an eighth grader who just couldn’t recall anything he read. He struggled to answer any questions and lacked any visual imagery. By the time his therapy was done, I had to look up the answers to the questions I asked due to the level of reading and the visualizing required. He is now well into his college career. I have used these techniques in my classroom as well, basing what therapy I used on the needs of each year’s students. Lindamood-Bell is the one program that I thought was missing from the curriculum. Lindamood-Bell is a perfect supplement to a core reading curriculum, both for pull-out needs and in the whole classroom.

Should anyone be interested in knowing more about this therapy, contact me at swhited@redwood.mntm.org. I will do my best to service your questions and needs. ☺

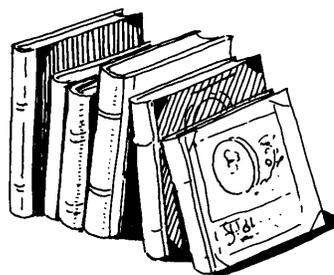
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¹www.lindamood-bell.com/about.shtml

²www.lindamood-bell.com/research/research.shtml

Sandra Whited is a graduate of Southwest Minnesota State University, Marshall Minnesota and has a BS degree in Elementary Education. She received training in the Lindamood-Bell techniques of LiPS, V/V, and Seeing Stars. She is presently a third grade teacher and Lindamood-Bell Coordinator at Reede Gray Elementary School, Redwood Falls, Minnesota.



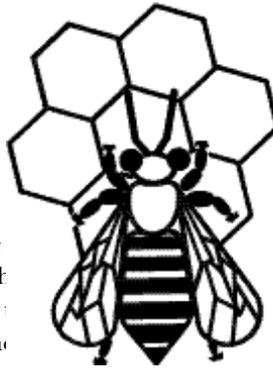
Establishing an Observation Bee Hive in the Classroom

Tim Rambow and Steven Thiesfeldt

THE USE OF live organisms in a classroom setting can enhance science education at any level. One of the more interesting organisms to observe is the honeybee. The use of a glass observation hive provides students with an educational experience they will never forget. Without disrupting or irritating the bees, a classroom observation hive will provide some amazing learning opportunities. Students can watch

- comb building, nectar and pollen gathering, honey production and storage;
- social interaction and communication within the colony;
- queen egg-laying and larvae development; and
- hatching and raising the young and protection of the hive by worker bees.

The typical observation hive is made of a wood frame, shaped like a window and ranges in size from about 18" x 24" to 30" x 45". Plexiglass® or Lexan® panels (a polycarbonate material is preferred over glass for safety reasons) on

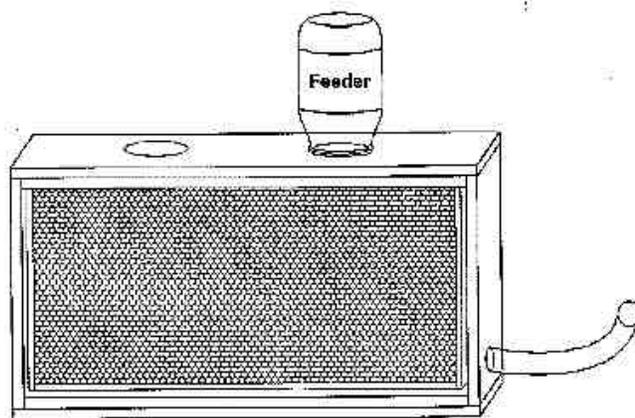


both sides contain the hive and allow a full range of observations. Most structures have an upper chamber for honey activity and a lower chamber for queen activity. This mimics an actual beehive arrangement. Observation hives can be built with basic carpentry skills and tools or purchased from a variety of suppliers.

Although the establishment of a classroom observation hive can be a rewarding experience, careful planning is required. The process is simplified if an experienced beekeeper is available to offer guidance and assistance. Don't avoid tackling the project, however, if such expert assistance is unavailable. A few basic guidelines can help in getting your observation hive ready for use.

Selecting a location

One of the first decisions to be made in establishing an observation hive is selecting a location. Choose a spot within the classroom that is easily observable and close to a wall or window but not in direct sunlight. Too much exposure to sun produces a greenhouse effect that



will warm the hive and melt the wax. A temperature of less than 80°F is desirable; 68-72°F is ideal. The hive should be securely mounted on a counter or windowsill so it cannot be inadvertently knocked over or disturbed. The area should be well ventilated but not drafty.

Exterior considerations are also important. The hive entrance should be located away from high traffic areas. A second story entrance is ideal. If the bees must enter near ground level and close to pedestrian traffic, a fence or hedge four to six feet from the exterior wall and at least two feet higher than the hive entrance will direct the bees to enter and exit within the vertical channel provided by the structure. A natural water source near the entrance provides cooling for the bees; if none is available, a birdbath or trickling hose will help when the weather is extremely hot.

A flexible, transparent plastic tube is used to connect the observation hive with the outside world. The tube should be at least 1 inch in diameter, no more

than 3' in length and as level as possible.

The mounting should be flush at both ends without a lip. Too many bends, barriers or obstacles can frustrate or confuse the bees. If the tube is too long, the bees will find their way out but not back in. The easiest route for the tube can be

established through a window by replacing the glass panes with polycarbonate, cutting appropriately sized holes and sealing the edges with silicon. Routing through wood, brick or metal will pose greater challenges.

Building the observation hive

There are many plans for constructing observation hives on the Internet. A simple Google® search for "observation bee hives" will yield a variety of options. One of the most detailed is the University of Florida Institute of Food and Agriculture Science site located at <http://edis.ifas.ufl.edu/MG320>. The accompanying diagram shows a simple design provided by Ric Bessin on a University of Kentucky College of Agriculture website located at <http://www.uky.edu/Agriculture/Entomology/entfacts/misc/ef016.htm>. While even this plan can be simplified, a good understanding of hive dimensions and "bee space" is important. Bees will fill wide gaps with additional comb or

seal off narrow spaces.

The simplest option is to purchase a commercial kit. A two-frame unit can be purchased for about \$100 and assembled in less than an hour. One reliable source for these kits is B & B Honey Farm. You can visit their website at www.bbhonefarm.com. The site includes a catalog with a navigable index. A full range of beekeeping kits, supplies, and materials is available along with expert assistance.

Whether you are building your own display unit or purchasing a kit, be sure that it contains a provision for a feeding unit. This is often a glass jar that can be filled with syrup and inverted over an opening in the top of the frame (see diagram). During periods when the hive is not being directly observed, the transparent side panels should be blocked to keep out light.

Equipping the hive

The easiest way to get bees into your observation hive is to work with an experienced beekeeper. He can carry the empty observation hive to the location of an established colony at least two miles from the school site. Once there, he will select one or two healthy frames from the donor hive and introduce them to the observation hive. His experience will tell him to select frames that are well populated with a mixture of honey and honeybee brood. If possible, he will also simultaneously transfer the queen from the donor hive. Once the frames are carefully inserted into the observation hive, he will close the hive,

return it to the classroom and reattach the entrance tube for the bees.

Transfer of the queen from the original hive has about a 75% success rate. If the queen cannot be transferred from the donor hive, a new queen must be introduced. Typically this new queen will be enclosed in a small cage at the time of purchase. An even smaller opening is made in the cage before it is intro-

*Establishing an
observation beehive
provides an
opportunity to discover
first hand the wonders
of God's creation and
moves the study of
science from the
textbook to the real
world.*

duced to the entrance of the observation hive. The new queen should leave the cage within a few days to join the hive.

If an experienced beekeeper is not available, you can purchase complete kits with instructions for starting a colony from the supply company mentioned earlier. A third option is to capture a stray swarm of bees but this poses

safety and logistical challenges for the novice!

Maintaining the hive

Once the bees are in the hive they will need to be fed. A syrup mixture can be prepared by adding one part sugar to one part hot water. Allow the mixture to cool before introducing it to the hive through the feeder. Continue to feed the bees in this manner until the nectar begins to flow. Avoid overfeeding; too much food will encourage the bees to store the excess and restrict the queen's egg-laying space.

Examine the hive weekly to monitor cleanliness, food supply, and population. Accumulated dead bees may be cleaned out periodically if the bees do not take care of the task themselves. This is primarily for aesthetic purposes. The transparent side panels can be coated with Vaseline to prevent the bees from coating them and blocking viewer visibility. If the hive becomes too crowded, bees will swarm from the hive to establish a new colony. Sometimes the queen accompanies the swarm, necessitating the establishment of a new queen in the display.

Enjoying the wonders of God's creation

Establishing an observation beehive presents some challenges, but the finished product is well worth the effort. It provides an opportunity to discover first hand the wonders of God's creation and moves the study of science from the textbook to the real world. An observa-

tion hive has been established in the biology laboratory at Martin Luther College using guidelines and procedures described in this article. Over the past year students, visitors and staff members have been able to observe bees carrying brightly colored pollen from flowers to the hive. Some viewers have learned to distinguish the queen from the drones and the workers. A swarm leaving the hive was captured on video along with a special dance by a worker bee to communicate directions to a new home. With an observation hive in your own classroom, you can expect similar experiences. What better way to learn science and grow in appreciation of God's creative power than to experience it first hand! ✨

Tim Rambow is Superintendent of Grounds and a professional beekeeper. Steven Thiesfeldt teaches and is the Vice President for Administration. Both serve Martin Luther College, New Ulm, MN.



Teachers as Recruiters

Ronald Brutlag

HOW MANY TIMES have I heard these comments: "I want to be just like Miss Stelter." Or, "I want to replace Mr. Schultz." Or, "I hope that I can teach just like Mr. Welch." As the Director of Admission for Studies in Educational Ministry at Martin Luther College, I hear comments such as these each day that I am out recruiting young men and women for educational ministry. You teachers in the Lutheran elementary schools, the area Lutheran high schools, and the Prep schools are doing a wonderful job of modeling teaching and encouraging your students to think about the teaching ministry. You make recruiting easy to do since you have already set the wheels in motion for these students to begin thinking about the public ministry. We at Martin Luther College thank you for being these front people. Keep doing what you are doing and think about other ways to encourage our young people to consider ministry as their life's vocation.

I think the most important encourager from you is a smile. When students see that you are happy and excited about your ministry, it tells them that maybe they too could be happy in min-

istry and that it is something to get excited about doing. Our actions speak volumes to our students. Check out what you do most often, frown or smile. A smile is easy to put on each day; doing cart wheels isn't necessary unless you are really good at them. You can't always determine the conditions of the day but you can control the attitude you have in handling the conditions. May your attitudes always be like that of Christ, your role model.

Identifying students who have the gifts and talents for ministry should be a yearly activity. Once named, these students should be encouraged to think about the teaching ministry as their life's work. A few encouraging words on a paper, a test, an essay all help to instill the desire of serving the Lord as a public minister be it in education or the pastoral ministry. Speaking to parents about the children's gifts and talents and how these gifts are qualifiers for ministry is a good practice. Parents need to be aware of this so they can also encourage ministry as something for their sons and daughters to be thinking about early in their education.

Another avenue for encouraging ministry in your students is to provide numerous opportunities for them to get

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involved in ministry activities. Have those students you have identified as ministry candidates help in the classroom as tutors, correctors, leaders, helpers in Sunday School, or assistant teachers in the VBS program. As they mature and advance to high school, hopefully this encouragement will continue in programs such as Taste of Ministry, the Titus and Timothy programs, chapel readers, piano/organ players, or whatever else you can think of that gives a feel for what ministry is like.

Tight schedules make getting into the Lutheran elementary schools difficult for the MLC recruiters, but we would like to visit your school when we are in the area recruiting, if possible. If we can't make the visit, ask a student from your congregation or neighboring congregation to make a ministry presentation when he or she is home for break. Have these students visit classrooms, conduct a chapel service, or talk one on one with students who have a desire to study for the public ministry. MLC students are more than happy to do recruiting like this in their own school/congregation or other congregations. They especially like invitations to make these presentations during spring break in the states of Florida, Texas, Arizona, and California.

Finally, when the time is right, bring students on the MLC campus. Maybe the first visit is a half day field trip. Then later in the high school years bring students to the MLC Focus on Ministry weekend. While on this type of visit the students are involved in activities that

help them understand ministry better and to get answers to their many questions.

I would like to encourage the LES teachers to make use of the units (PK-K, 1-2, 3-4, 5-6) on ministry that were sent to all schools last year. If you haven't seen these well-prepared units, ask your principal if he received them and then plan out an entire week of activities that speak to the children about ministry. Schools were sent one copy of each unit and they can be copied for multiple usage.

Our Lord has said that the harvest is plentiful and the workers few. That is still true today even if at this present time we might think otherwise. In the WELS we can not afford to have a drought of candidates for the public ministry. Therefore, it is important that we continue to recruit young men and women for service in the Lord's Kingdom here on earth. Blessings on your recruiting efforts. ✠

Ronald Brutlag is the Director of Admissions - Studies in Educational Ministry, Martin Luther College, New Ulm, MN



The Importance of Family Involvement in Becoming Literate

Cheryl Loomis

PARENTS ARE a child's first and most important teacher. Throughout history, the family has been identified as the primary source for learning. Before the existence of schools, cross-generational learning within the context of the family was the norm. Children have learned values and cultural practices from their families as well as skills needed for daily living. Clearly, learning is a part of family life.

A large and growing body of research supports the critical relationship between early childhood experiences and successful life-long outcomes (MN School Readiness Initiative, 2003). Parental involvement is a critical factor in fostering a young child's cognitive growth and academic success (Shaver & Walls, 1998). Very early in life, children take their first steps toward learning to read and write. Even in the first few months of life children begin to experiment with language (IRA & NAEYC, 1998). Everything that happens at home affects a child's feelings about learning long before formal education begins.



Family literacy

The term family literacy is a complex concept (Morrow, 2001). The following is a description of family literacy as defined by the International Reading Association in a brochure titled *Family Literacy: New Perspectives, New Opportunities* (Morrow, Paratore, & Tracey, 1994).

- Family literacy encompasses the ways parents, children, and extended family members use literacy at home and in their community.
- Family literacy occurs naturally during the routines of daily living and helps adults and children “get things done.”
- Examples of family literacy might include using drawings or writing to share ideas, composing notes or letters to communicate messages, keeping records, making lists, following written directions, or sharing stories and ideas through conversation, reading, and writing.
- Family literacy may be initiated purposefully by a parent, or may occur

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spontaneously as parents and children go about the business of their daily lives.

- Family literacy activities also may reflect the ethnic, racial, or cultural heritage of the families involved.
- Family literacy activities may be initiated outside the home in institutions such as the school or the public library. These activities are often intended to support the acquisition and development of school-like literacy behaviors of parents, children, and families.
- Family literacy activities by outside institutions may include family storybook reading, completing homework assignments, or writing essays and reports.

Why family literacy is essential

Parents, or family members who care for children, are the children's first teachers. They remain the child's teacher for the longest time. Beginning at birth, children's experiences affect their success in becoming literate. The success of the school literacy program frequently depends on the literacy environment at home (Morrow, 2001).

Learning to read and write can start at home, long before children go to school. Early experiences with spoken and written language set the stage for children to become successful readers and writers (Armbruster, Lehr, & Osborn, 2003). Young children especially need to be engaged in experiences that make content meaningful and build on prior learning. It is vital for all

children to have literacy experiences in early childhood programs. Such access is even more critical for children with limited home experiences in literacy (IRA & NAEYC, 1998).

Children learn the purposes of literacy through daily life in their family. Some families actively draw their children into literacy experiences by inviting them to help with grocery lists, send mail to a friend or relative, listen to storybooks, or talk about daily events. Other families expose their children to print in more peripheral ways. These children may see print being used but it remains in the hands of others. Families' literacy practices, interests, resources, and time, as well as their ways of interacting with their children, have a great influence on how and what children come to know about written language (Owocki, 2001). The wider the exposure, the more comfortable a child will be with formal school experiences. Literacy learning in school mimics home experiences.

Reading aloud to children has been called the single most important activity for building the knowledge required for success in reading (Armbruster et al., 2003). The Family Literacy Foundation (2002) states the following reasons for reading aloud to children:

- Studies prove that the most important thing adults can do in preparing young children for success in school and reading is to read aloud with them.
- Many doctors believe that a child that has never had the experience of being read to is not a fully healthy

child. The American Medical Association has suggested that all doctors prescribe “reading to children.”

- Reading aloud with children regularly is an extremely effective medium to build relationships and communicate with children.

Often educators see children coming to school already knowing how to read and write, apparently without formal instruction. Although it may seem as though some children acquire these understandings magically or on their own, studies suggest that they are beneficiaries of considerable, though playful

Reading aloud to children has been called the single most important activity for building the knowledge required for success in reading.

and informal, adult guidance and instruction (IRA & NAEYC, 1998). Morrow (2001) suggests that this line of reasoning is beneficial for two reasons. First, it allows educators a chance to examine home practices that could be successful in school settings. Second, it provides information on the critical role families play in the development of a

child's literacy.

Morrow (2001) reports characteristics common to children who read and write at an early age without direct instruction. The IQ scores of these children are not consistently high; they range from low-average to average. Their parents read to them and are eager to help with reading and writing activities. The parents themselves read a variety of materials. Reading and writing materials are found throughout the house. Parents in these homes frequent bookstores and the public library. The household is organized with scheduled activities. Books are associated with pleasure as they provide a setting for positive interactions between adults and children. One can argue that it is the literacy-rich environment, not parents' education or socioeconomic status, that correlates with children's early literacy ability.

Effects of the media on literacy development

Children are growing up in a digital age. The beginning of the 20th century provided a much different environment for young children than what they have today. Media for young children most likely consisted of books and traditional toys. Homes were probably quiet places for young children. Families provided their own entertainment at leisure times. Contrast that with the households of today. There may be little time when children aren't bombarded with media (Anderson & Evans, 2001). Ninety-nine percent of families in America own at

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least one television set. TVs, VCRs, computers, video games, and interactive toys are used in homes on a daily basis.

In the spring of 2003, the Kaiser Foundation conducted the first-of-its-kind study of electronic media in the lives of infants, toddlers, and preschoolers. Many experts have argued that it is especially critical to understand media use by the youngest children, noting that because social and intellectual development are more malleable in these early years, media use at this age could have an especially significant impact (Rideout, Vandewater & Wartella, 2003). While there is no conclusive research to date, some theories have emerged. Young children learn from the experiences and relationships they have in their environment. Background media distract children from play, the work of exploring and understanding their environment. Background language from TV and radio interferes with a child's self-talk and social interaction (Walsh, 2004). It is important to note that media that are background for the young child may be foreground for the parent (Anderson & Evans, 2001). Adults need to consider this when turning on the TV for "background noise."

Television watching begins at an early age, well before the medical community recommends. The American Academy of Pediatricians recommends that children under the age of two not watch any television (Rideout et al., 2003). For many parents this is an unreasonable expectation. The primary concern with electronic media is that they often take

the place of activities in which a young child can be actively involved with adults. Children have a much easier time learning concepts when they are connected with the things they experience with all their senses in their everyday lives (Walsh, 2004). Television watching, regardless of content, has a lasting effect on learning. Ages two to five is a critical period in which the brain is primed to take in information and make relationships. When children watch TV, they are habituating to a learning state that lacks physical, emotional, and even some sensory involvement. This habituation will affect lifelong learning patterns (Hannaford, 1995).

The amount of television watched is a predictor of school performance. Increased TV viewing predicts poorer performance (Gentile & Walsh, 2002). Children growing up today spend an enormous amount of time glued to the TV screen. They average 35 hours per week of screen time, either watching TV or playing video games. Before entering kindergarten they are likely to have spent 4,000 hours watching television - more time than they spent doing anything but sleeping, more time even than they will spend in school (Levin, 1998). Four- to six-year olds who are "heavy" TV users spend less time reading or playing outside than other children their age (Rideout et al., 2003).

Many very young children have a TV, VCR, or video game player in the bedroom, and these children spend substantially more time with those media. Thirty-six percent of all children six and

under have their own TV in their bedroom; one in four has his own VCR or DVD player, and one in ten has his own video game console in his room (Rideout et al., 2003). It is difficult, especially for a child, to escape the lure of the TV and spend time in other activities when the TV is at such easy disposal. Children who have such “bedroom” media watch five hours more TV per week than children without a TV in their bedroom (Gentile & Walsh, 2002).

Family media habits predict children's school performance (Gentile & Walsh, 2002). How much the TV is left on in the home has a significant relationship to the amount of time children spend watching it, and to the time they spend reading. Two out of three newborns-to-six year olds live in homes where the TV is usually left on at least half the time, even if no one is watching; and one-third live in homes where the TV is on “almost all” or “most” of the time; and children in the latter group of homes appear to read less than other children and to be slower to learn to read (Rideout et al., 2003). Healy's (1990) premise is that television, video games, and other elements of our culture compromise children's ability to concentrate and to absorb and analyze information.

Some argue that all TV, regardless of content, has negative effects for children under the age of three. These effects could include shortened attention span, reduced language development, and intellectual passivity (Anderson & Evans, 2001). As a result, educational television is not spared criti-

cism following Healy's (1990) two-year research of *Sesame Street*. She states the format of *Sesame Street* goes against how children will read. Animation and agitation give bits and pieces of information. This is in opposition to the active, sustained work of connecting ideas that is needed to understand text. Sensory overload causes the brain to “tune out.” This is the nervous system's defense to overstimulation. Preschoolers who watched a lot of *Sesame Street* tended to do poorer in school than children who watched no TV (Hannaford, 1995). Healy (1990) concludes learning is best accomplished through active, hands-on experiences, imaginative play, listening with enjoyment to children's literature and not from television, which has made a science of taking control of viewers' attention. Reading demands voluntary attention from a mind that can hold a train of thought long enough to reflect on it. There is no research known to date to show that brain development can be accelerated or advanced by any television show or product (Walsh, 2004).

Home environments that foster literacy development

Research indicates that children who are read to regularly by parents, siblings, or other individuals in the home, and who have parents who are habitual readers themselves, become early readers and show a natural interest in books (Morrow, 2001). Most parents support their children's becoming literate, some more effectively than others (Spiegel,

Fitzgerald, & Cunningham, 1993). They found that highly literate parents and less literate ones differ in their opinions of what is effective. This finding implies that teachers should tailor their strategies for helping different parents help their children.

Spiegel et al. (1993) made the following observations based on their research of parental perceptions of emergent literacy.

- Parents, in general, considered literacy materials and events important during preschool years. Low-literacy parents on average ranked literacy materials and events as more important than did high-literacy parents.
- Low-literacy parents and high-literacy parents had different perceptions about their roles.
- Low-literacy parents tended to view parents' roles in preschoolers' literacy development as involving a blend of naturalistic activities and instructionally oriented activities.
- High-literacy parents tended to view their roles in the preschoolers' literacy development from a naturalistic perspective and explicitly rejected instructionally oriented activities.
- Adult role modeling was perceived by low-literacy parents as less important to preschoolers' literacy development than child-centered events and literacy materials.
- Both low- and high-literacy parents placed more importance on reading than on writing.

A relationship exists between exposure to language in early childhood and later school success. Researchers have

found a very strong relationship between language development during the early years and reading ability in the primary grades (Owocki, 2001). Rich language experiences during the preschool years play an important role in ensuring that children are able to read with comprehension when they reach middle school (Dickinson & Tabors, 2002). One of the strongest predictors of later reading ability is the amount of one-to-one conversation between adults and children. This conversation begins at birth, as parents talk to children and read to them long before they can hold a book. Reading's



first lessons don't happen in school; they begin in the crib (Walsh, 2004).

Families provide materials for the purpose of children's entertainment and education, as well as to help with daily routines and difficult times (Schickedanz, 1999). Games, toys, books, writing materials all find their way into a child's play. In play we see children explore and further their understanding of print and its functions (Schickedanz, 1999). Literacy is not defined by reading alone. Parents can encourage their children to make the reading/writing connection by setting up a special writing area that contains many kinds of paper, markers, pencils,

and crayons. Carry along writing materials for children to use in the car or when waiting for appointments. Celebrate children's writing efforts by prominently displaying their work for all to see (Neumann, 2004).

Individual perspectives

Educators need to respect the individuality of families, recognizing cultural and socioeconomic differences. All families may not be able to purchase books for their children. Some may need help in using the public library. Perhaps a family does not speak English or parents may have limited ability. In some cases the parent may be a teenager who has dropped out of school. Therefore, it is important to recognize cross-generational learning when defining family literacy. Morrow (2001) states there is evidence that many low-income, minority, and immigrant families cultivate rich contexts for literacy development. Their efforts, however, may be different from the school model many educators are accustomed to. Educators must learn from and respect parents and children from cultures in which books are not readily available, although evidence of literacy activity, such as storytelling, exists. Berns (2004) contends adults play a large role in determining the type of books read by very young children, whereas this is not necessarily the case with television watching. Preschool children are able to use a remote but are not able to visit the public library on their own.

Summary

Family involvement plays a huge factor in the literacy development of young children. Research demonstrates that reading to a child is the single most important factor in raising a reader. Early exposure to language improves a child's school success. It is vital that educators share information about the negative impact of television watching on the developing child. Teachers need to share this message with parents - to raise a reader, turn off the TV. Working with families to find alternatives to "tube time" will have a positive impact on a child's cognitive and social development. ♣

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Cheryl Loomis currently serves in early childhood education at Martin Luther College. This article was written to fulfill requirements for a master's thesis.

Saxon Math: Fire and Ice

Brian Maurice

EITHER YOU LOVE it or you hate it. Those riding the fence are few and far between. I'm referring to the celebrated and disdained Saxon Math program, developed by the late John Saxon, a former Air Force officer and high-school math instructor.

The Saxon philosophy is simple—that students learn by doing and that students do not master a concept on the day it is introduced. The traditionalist math educator relies on drills, memorization, and practice. To that end, Saxon Math is generally considered traditional. Yet the time-honored idea of drill-and-practice is enhanced with constant review. Beginning at the fourth grade level, students complete “Mixed Practice Problem Sets,” which provide exercise on previously introduced concepts as well as the new concept. Students focus their efforts on practicing mathematic skills during class; the teacher acts as tutor and coach.

John Saxon believed that the best way to teach mathematical ideas is to let the student work meticulously designed exercises, which create productive thought patterns that make use of the concepts. Generally, students do not grasp concepts quickly. And those that are rapidly gained are just as hastily lost.

Saxon maintained that long-term practice is required for students to achieve a lasting understanding. He cited the research of Benjamin Bloom, which indicates continuing practice is necessary to attain what Bloom calls automaticity. When automaticity has been reached, students will then be able to encounter the problem and the concept or concepts needed to solve it will come almost involuntarily to mind.

One of the unique features of Saxon Math is that it methodically distributes instruction and practice as well as assessment throughout the year. This is opposed to grouping, or massing, the instruction, practice, and assessment of related concepts into a short period of time—within a unit or chapter—as is the custom with other math texts. Many educators have felt the frustration of poor results on cumulative assessments such as a unit review. The students simply don't retain well what should have been mastered several chapters in the past. Saxon Math uses a distributed approach that produces significantly higher levels of student retention than massed presentations found in programs with a chapter-based approach.

Saxon Math is strikingly free of any lessons that distract from the major topics of importance. There is no dilution

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of the vital topics with less important lessons. Unlike most other books, this series has little tendency toward the “inch deep and mile wide” presentation for which other American textbooks have been criticized. A teacher is very likely to complete the text within a school year and give students a high chance of absorbing every concept. There is no need for teachers to pick and choose among lessons. Saxon Math also stresses the mental over the mechanical and eschews calculators, thus leading to both greater computational competence and to development of a deeper “feel” for the concepts involved.

A typical lesson using the upper elementary levels of Saxon Math involves four instructional components. First, teachers lead a warm-up activity for eight to ten minutes in which students take a quick Facts Practice Test to increase their proficiency with basic operations, solve several mental math problems, or complete a problem-solving exercise by using such strategies as making lists, drawing pictures, working backward, and guessing and checking. Second, the teacher will introduce the new concept. This should take no longer than fifteen minutes for any lesson, and is often much less than that. Third, the students have the opportunity to complete lesson practice problems. In the earliest editions of Saxon Math, practice problems were not included. This is no longer the case with all revised editions. Finally, students begin work on the aforementioned “Mixed Practice Problem Sets.” While students

solve problems that provide practice on nearly all previously introduced concepts, as well as the new concepts, the teacher moves around the room facilitating questions. Assessment tests are given after every four or five lessons depending on the level of the text.

As the Saxon Math series has developed over the years, so also have the supplemental materials that accompany the program. Ancillary materials that are now available for the upper levels include Real-World Applications, which is a booklet of blackline masters containing lesson-specific word problems designed to help students apply their mathematical knowledge to real-world context. Students are given the opportunity to use mathematics in the context of consumer economics, carpentry, construction, travel, investing, profits, athletics, physics, chemistry, and other topics. Saxon Publications has also aligned itself with Accelerated Math, which allows schools to provide students with custom-tailored supplemental practice activities and assessment tools. This is an extremely costly option, however. Each upper level of the program includes Test Masters as well as optional Test Generators to customize versions of each test. Ancillary materials used at the primary level that are not included in the Classroom Kits consist of a Connections to Children's Literature book, manipulative kits, and additional overhead transparencies.

There are some components of the Saxon Math series that some may see as shortcomings. For one, the texts have very little eye appeal. There are no four-

color printed pages with vibrant designs, dazzling graphics, and pictures of students enjoying math together. It's black on white all the way, reminiscent of your high school geometry book. Another drawback might be that teacher's editions are little more than answer keys. You will find no margins full of objectives, lesson presentation suggestions or ready-made example problems. One more point to consider may be the Classroom Kits used at the K to 3 levels. These kits include a teacher's manual, an assessment binder, ready-made lesson materials, and laminated math center materials to supply a classroom of up to thirty-two students. All components are sold as an entire unit and carry a rather high price tag, especially for schools with small classes.

As advocates of basic math skills, our faculty chose Saxon Math for our upper grades because we felt our students lacked rudimentary proficiencies. Too many children were reaching upper grades and graduating without fundamental math knowledge, thanks in part to a curriculum that was too undemanding. Our previous series was too much oriented to making math amusing or likeable, and far too low on developing classic procedures. We were looking for a more structured approach to computation strategies that featured a review-to-remember format. Saxon Math fit that criterion perfectly.

Quoting standardized test results as a measure of the success of our math program can be a slippery slope. Yes, our students score higher since we began using Saxon Math than they did in the

past. That was never a target we had when choosing Saxon. Our aim was to dramatically increase proficiency on basic skills. That has unquestionably happened. Rather than cite test scores, we like to gauge some of our success on results after students leave our building. In the past we often got the "what in the world are you doing (or not doing) to these kids in math" sense from the three high schools our students can attend after graduation. Real, or simply perceived, it was an uncomfortable feeling as an educator. That discomfort no longer exists. While some of the high schools have expressed concerns about our using Saxon, they no longer send the vibe that our graduates are unprepared to face the rigors of high school math.

Most of those who disregard Saxon Math have never had the opportunity to teach it. Those who have used it seem to marvel at its conventional and successful methodology. It would be worthwhile for any faculty examining their math curriculum to scrutinize both reformed and traditional style texts as an even-handed method of study. If you find your curriculum needs to be more classical, computational, and structured, then Saxon Math may be the perfect solution. ♣

Brian Maurice teaches at Trinity-St. Luke's, Watertown, WI

An Associate of Arts Degree in Early Childhood Education

After several years of discussing informally whether Martin Luther College should offer a two-year associate of arts degree, the college administration decided last fall to send a questionnaire to the congregations of WELS. The survey was intended to see what congregations were planning in the area of early childhood education and whom they would be willing to call to serve in those programs.

A survey was sent out in November 2004 to 1050 congregations in WELS. Some 700 surveys were returned. The surveys contained a description of the associate of arts degree program that MLC could offer. This would be a two-year 65 credit program which would include some general education, some courses in religion, and courses in early childhood education. Students could take most of the program through distance education (online), but they would be required to attend one summer on campus. The people who completed the survey—pastors, principals of Lutheran elementary schools, directors of early childhood education programs—were asked how likely their congregation would be to call a person with an AA degree and how many persons they estimated in their congregation would be interested in enrolling in such a program. If a congregation did not have an early childhood program, they were asked what plans there were for opening an early childhood center. If

they did have an early childhood program, they were asked about the background and training of staff they currently had, how large the staff was, what the budget of their program was, and what percentage of the budget came from fees that were charged parents.

These were some of the key findings:

- Seventy-two congregations are planning on opening a preschool/ECE center in the next five years.
- Eighty-two congregations have long-range plans for opening a preschool/ECE center.
- One-half the teachers in preschools/ECE centers have a college degree.
- One out of four teachers in preschools/ECE centers have no college training.
- Half the teachers in preschools/ECE centers have some training in early childhood education.
- Congregations indicated that if the associate of arts program exists they could use over 150 graduates of that program.
- Congregations indicated that they thought that there would be over 600 persons interested from their congregations in such a program.
- Nearly two-thirds of the congregations said they would provide some of the costs for persons enrolled in an associate of arts program.

The persons completing the survey were also invited to write comments regarding this program. The following

are two such comments.

I personally think this would be a great program. An advantage would be to help ensure that ECE staffs are well-trained and well-grounded in the Scriptures. It would also make “selling” the program easier to prospective parents whoa are wary of sending children to a program without a “documented” qualified teacher.

The expense of housing, benefits, etc. for a person with an associate degree wouldn't be feasible. We would rather hire someone with a four-year degree if we would take that step.

The college expresses its thanks for the many persons who took the time to complete the survey and the additional comments they wrote on both sides of the issue. The complete report can be found on the MLC website (www.mlc-wels.edu).

After considering the results of this needs assessment, the administration and the Governing Board resolved to pursue the possibility of offering such a program. ❖

REVIEWS

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Fink, L. Dee. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. San Francisco: Jossey-Bass, 2003. xviii, 295 p. Diagrams, appendices, index, bibliography. Hardcover, \$35. ISBN 0-7879-6055-1. [Also available as an E-book]

Much of our traditional teaching consists of little more than an “information dump,” resulting in little long-term learning. This is L. Dee Fink’s frank assertion. He directs teachers to aim for something deeper, and contends that the key to doing so is in the design of the course.

Where a standard syllabus outlines topics to be covered, Fink suggests syllabi should lay out a more comprehensive plan—not merely the content of the

course, but higher, applied aims. A “learning-centered paradigm ... includes attention to important content, but drives teachers to incorporate new kinds of learning (rather than new content)” (55). The book makes a strong push for finding ways to move basic content mastery outside of the classroom (through text readings, web-enhanced instruction, etc), so that more time is available in the classroom for “significant learning experiences”—getting students engaged in their own learning, generating high energy levels, paying attention to the process of learning, achieving important outcomes. At a time when content-based standards are getting strong political backing, Fink argues from the other side of the aisle. Teaching students how to learn is as

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vital as any amount of content we can get them to remember.

Fink demonstrates what he advocates by applying his theoretical proposals to concrete situations. *Creating Significant Learning Experiences* is persuasive because of numerous case studies of creative teachers who are making use of these principles effectively.

Some of the more challenging aspects of Fink's work have to do with institutional assessment and organizational change. Fink hopes to see better networking between teachers, schools, and professional associations to foster coordinated strategies for optimal learning. Too often we assume that if student performance is weak, the problem must be in the students and not in our approach. Rather than blaming all deficiencies on the students, Fink asks us to

examine ourselves, the design of our courses, our overall programs and institutional methods, and seek to work cooperatively with students' learning styles in mind.

Creating Significant Learning Experiences is written for college instructors, but the principles outlined in this book are certainly applicable to high school and upper elementary teaching as well. It would be a good book for joint study by faculties or by departments within a school, particularly on the high school level.

Note: The author has set up a website to "keep the conversation going" concerning significant learning: <www.significantlearning.org> It includes a brief (8-page) description of what Fink calls his "Taxonomy of Significant Learning."

David Sellnow