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The Lutheran Educator

The WELS Education Journal



The Lutheran Educator

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

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Patience and Understanding

Patience and understanding, two virtues, no doubt, for which every teacher has prayed. Consider this perspective of patience. Dan Gartrell, an early childhood professor, writes of a comment teachers often hear, “Oh, you must be so patient to work with children.” He states that the dictionary definition of patience implies a negative context, being able to bear one’s burdens without complaining. Gartrell believes that in the classroom, patience implies a “teacher vs. child” mentality that somehow the children are the opposition to the superior teacher. This certainly does not reflect his attitude toward teaching. Rather he believes that patience manifests itself in understanding. People are not seeing a patient teacher; they are seeing one who understands the population with which he works. Can we draw an analogy of patience and understanding to our outreach efforts? Do we view change as a burden or an opportunity?

WELS educators have the words of the Great Commission etched in our minds and hearts. No doubt these words of Matthew 18 form the base for our school mission statements. Go and make disciples of all nations – global thinking. While this goal of outreach may be easy to articulate, implementation takes many forms and can become challenging. Every congregation and school within our synod carries out this command in a different manner – local actions. As school populations become more diverse, educators must develop a broad perspective concerning family involvement. The gospel message transcends all differences.

WELS Schools Challenge 2010 encourages an outreach strategy to “promote an outreaching spirit within WELS schools” along with “developing strategies for reaching the entire family of new students.” Are teachers working toward these goals with an attitude of “patience” or one of “understanding”? Working with first generation Christians will be quite different from fourth or fifth-generation Christians. The challenge to understand differences can cause some to lose patience. Stereotypical notions of race, gender, parenting styles, and socioeconomic status influence our attempts at understanding. Outreach may be reduced to strategies and programs without attempts to build relationships. It is the teacher’s job to reach out to all families especially those who are hard to reach. Understanding our schools from the viewpoint of a family new to the WELS will provide valuable insight and increase our understanding of a family.

Family life is never far from a child. Parental involvement has been proven to have a positive influence on a child’s academic success. Much more than earthly gain is at stake for children and their families as we share the Gospel with them. Pray that the Lord will bless our efforts to understand others as we reach out with the message of salvation.

CAL



Christian Joy Produces Prayer

John R. Schultz

Be joyful always; pray continually; give thanks in all circumstances, for this is God's will for you in Christ Jesus. (1 Th 5:16-18)

A surprise gift is received, a vacation is taken, an old friend telephones—people are naturally happy on some occasions. However, this happiness depends on circumstances. Christian joy is not dependent on circumstances, but looks back to what Christ has done and ahead to the resulting eternal salvation. This God-given joy is constant. It is intertwined with saving faith. Among other things, Christian joy is expressed in continual, regular prayer.

Continual prayer certainly involves calling to God in times of crises. In 1980 the Mt. St. Helens volcano in the state of Washington was threatening eruption. Standing near the crater filming for a local television station was a young reporter. Suddenly the mountain blew. Steam and ash were hurled thousands of feet into the air. The reporter ran for his life while the camera was rolling with the mike on. The reporter's words—his prayer as he is running—is preserved for posterity: "Oh, God, oh, my god—help!

Help!—Oh, Lord God, get me through. God, I need you, please help me; I don't know where I am. It's so hot, so dark. Help me, God! Please, please, please, please—oh God!" God did help him. He survived. "Call upon me in the day of trouble; I will deliver you, and you will honor me" (Ps 50:15).

Christian joy leads us to pray continually in all of our affairs, even those that may tempt us to be discouraged: the cancer patient whose test results keep getting worse, the friends or relatives who, despite our prayers, divorce anyway. The Apostle Paul could relate to seemingly unanswered prayer. Three times he prayed to the Lord to take away the "thorn in my flesh." Paul did not get the response he wanted, but the Lord answered his prayer: "My grace is sufficient for you, for my power is made perfect in weakness" (2 Co 12:7-9). God answers prayer. He answers in his own way and in his own time, but always for our good. "We know that in all things God works for the good of those who love him, who have been called according to his purpose" (Ro 8:28).

Christian joy moves us to "give thanks

in all circumstances” (1 Th 5:18). How easy it is to forget to thank God. Our sinful flesh causes us to forget, or worse yet, to lethargically neglect humble gratitude to God. Remember, ten lepers were cured; only one returned to thank Jesus. As joyful Christians, we pray continually that God would give us an attitude of gratitude. “Sing and make music in your heart to the Lord, always giving thanks to God the Father for everything, in the name of our Lord Jesus Christ” (Eph 5:19-20).

Pray continually—how is it possible? We accept Jesus’ invitation to call on

him in trouble; we bring all things to him in faith that he will hear our prayer; we have an attitude of gratitude for all he does for us. God bless your joyfully motivated prayers.

Read some more: Ephesians 6:18-20

Dear Lord God, we would speak to you.

Our joy in what you have done for us and what you have promised us in eternity move us to pray to you continually. Hear our prayers according to your will. Amen.

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

MLC Graduate Level Courses

Martin Luther College is offering a series of graduate level courses in professional education. These courses are intended to improve the skills and competencies of teachers and principals in Lutheran elementary schools.

In the future the college will apply to the Higher Learning Commission of the North Central Association and the State of Minnesota for permission to offer a full masters degree in education.

Enrollees select one of three emphases: leadership, curriculum and instruction, and special education. Each course carries 3 credits. Students will earn 30 or 36 credits in the program depending on an option for a paper.

The courses will begin in the summer of 2004. The first two, Foundations of Ministry and A Balanced Approach to Reading Instruction will be offered on campus in the summer session. Beginning in the fall of 2004, two on-line courses will be offered each semester. The courses scheduled for the fall semester are Educational Leadership and Teaching Children with Learning Disabilities. Courses offered in the spring session will be Improving Instructional Methodology and Issues in Education.

Costs for the courses are \$200 per credit. Scholarships are available from the Commission on Parish Schools. Contact James Brandt for more information.

For more information and application material for the summer session courses visit the MLC website (www.mlc-wels.edu).

Portrait of a Master Teacher

Theodore Hartwig

IT HAPPENED ONE DAY in a physiology class during our eighth grade year. Our teacher was an inveterate cigar smoker. During recesses and over the noon hour he regularly indulged his habit in the cloakroom behind our classroom. It would be either a fresh cigar or the butt of a previous one. On this particular day during a class hour and as we watched in amazement, he lit up one of those butts, drew a clean, white handkerchief from his pocket, took a long drag from his cigar, and blew its smoke through the handkerchief. It left a distinct, deep, yellow stain on the area into which he had blown. Then came the lesson: "Now you see what smoke does to your lungs. Smoking is not good for your health. Don't fall into this bad habit!" And whether his advice was followed or not, all of us remembered this shocker of a lesson for the rest of our lives.

He served as principal and teacher of the upper grades at St. John's Lutheran School in Wauwatosa, Wisconsin, through the 1930s and into the mid40s. At the time of my three years under his guidance, he was nearing in age the mid century mark. After retirement, he lived

his last years, a member of our WELS congregation, in Burlington, Wisconsin. Apparently impervious to the normal ravages of heavy tobacco use, he died in December 1969, at the age of 85. His name was Max Hackbarth.

On moving with twelve sixth grade classmates into our school building's second floor classroom, our first impression of this new teacher was consumed by the strictness of his discipline. He achieved it neither by threats nor by shouting but rather, I suppose, by the austerity of his external appearance (our first male teacher) and by his no nonsense demeanor and classroom regimen. There was no empty bluster. His discipline was unfailingly backed up by applied punishment in the form of withdrawing coveted privileges and, at the close of each day for anyone who had transgressed his strict rule against whispering, a slap on the outstretched palm of the hand with his ruler. This was generally both administered and received with good grace. The hurt was more to the feelings than to the skin. We were still living at a time when children did not try to set their parents against the teacher and, even more critical, when parents did not regularly side with their

offspring against the teacher. In the context of the no whispering rule, I should add that we resorted to lip-reading so that, with three years of practice, we became quite expert at this silent form of classroom communication. As for the discipline, our impressions of its strictness changed over the course of three years. It happened not from relaxation of the discipline but from our becoming adjusted to it, much in the same way as almost anything difficult at the start becomes easy and enjoyable with experience. Thus, as eighth graders, we were no longer aware of being schooled by a strict disciplinarian. In our perception, the clouds had become sunshine.

No doubt, Mr. Hackbarth's classroom discipline, with the apple more in evidence than the rod, contributed mightily to his effective teaching. His pupils, by and large, learned willingly, accepted his steep assignments as a matter of course, and drew broadly and deeply from the wells of knowledge, which he dispensed. In catechism class, the text was used to fix Luther's six chief parts

indelibly on our memory. In the 130 pages of exposition with supporting Bible passages that accompanied Luther's Enchiridion, we had to memorize 319 of those 551 passages, but were spared trying to master the exposition's 457 questions and answers. Our teacher did the explanation and practical application of Luther's six chief parts in his own inimitable way.

Our Bible history text from sixth through eighth grades was the Bible itself. Without benefit of notes or other helps, he told or professed those stories and their significance to us, and we reviewed their sources in the Bible for ourselves. His Bible teaching was strengthened by assigning huge quantities of memory work. This included short parables such as the Pharisee and the



Max Hackbarth

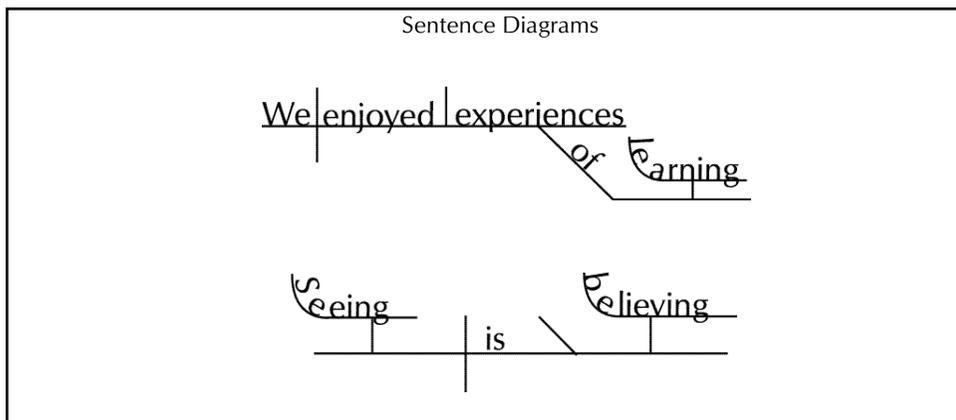
Publican, shorter chapters like 1 Corinthians 13, the shorter Psalms—1, 23, 121, and 130, and larger portions of Scripture such as the Sermon on the Mount in Matthew 5 to 7. After three consecutive years of identical assignments, these treasures of Scripture became part of our flesh and blood. It did not occur to us to make a fuss at home about all this work, nor would

that have evoked parental sympathy. We were living at a time which took for granted that learning does not happen in the absence of pain. It was also a time of fewer outside distractions such as over-hyped athletic competition with other schools at the elementary level. Work with the Bible was also accompanied by play. To strengthen expertise with the Bible's 66 books, about once a month we were involved in a game of finding Bible references, chapter and verse, as quickly as possible. The teacher gave the reference, there was a flurry to find it, the first who located it read it out loud, and so the race would proceed over a course of about twenty passages. This was but one device among many whereby Mr. Hackbarth exhibited his knack at teaching without our realizing that we were learning and enjoying it.

As occasions presented themselves, the Bible's spiritual lessons were buttressed by applications to our personal lives. One well-remembered example was his answer to a student's question about one child deserving preferred treatment for possessing what another

child did not have. So he responded with a story. "One of you has a dime, another a penny, not enough for the 50 cent price of admission to the movie you would like to see. Yet the man at the ticket booth lets both of you into the movie free. Why? Because one of you had a dime, the other only a penny? No, money was not the reason, but the man's kindness. Now draw your conclusions for yourself." This was our teacher's parable similar to the supreme Master Teacher's parable of the Laborers in the Vineyard, Matthew 20.

To his accompaniment at the piano, we learned hymns by singing them in our devotions at the beginning and close of each day and then brushing up on what had already been half learned through private review. At the rate of one hymn per week and with the same roster of assignments repeated each year, our memory chest grew to selected stanzas of about 35 hymns. His hymn choices, mercifully, were those with four line stanzas, such as "Abide, O Dearest Jesus" and "Lord, Keep Us Steadfast in Your Word," plus the occasional exception such as "A Mighty Fortress."



All of Mr. Hackbarth's pupils advanced from eighth grade to high school with an above average command of the English language. The competition of spelling bees honed our expertise in this area. Frequent exercises in diagramming complicated sentences did the same for recognizing the meaning, function, and variant forms of the eight parts of speech. A gerund, for example, required different diagramming from a noun or pronoun. While the latter were written directly on the horizontal line, a gerund required stilts supporting curved lines.

Correct usage of grammar and command of vocabulary were exercised with quizzes and composition assignments. On one occasion, a quiz took the following form. At his desk on a platform at the front of the room, Mr. Hackbarth had written down a list of some fifteen nouns ending in ...city, such as mendacity, pugnacity, felicity, audacity, ferocity, and so on. While the class was busy at personal assignments, he called each of us, one by one, to the front, showed us the list on his desk, and asked us quietly to define the words. At the end of the exercise, the words were put on the chalkboard and explained to everyone. It goes without saying that no one came out of this experience with distinction. Though somewhat humbling, it achieved its purpose; we remembered those words and their meaning. On another occasion he challenged our vocabulary and composition skills by dictating twenty out-of-the-ordinary words. These were to be put together immediately into a coherent composi-

tion. Not an easy, yet a memorable exercise in word knowledge and usage. Furthermore, these assignments did not have to be geared to the level of slower learners and could be done without any embarrassment to them.

Exercise in reading fluency was carried out by having us take turns, up and down the row, at vocal reading from selections of poetry and prose. No doubt, the effectiveness of the exercise

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A master teacher at any grade level can heighten the good recollections immeasurably.

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lay in the encouragement it gave to emulate or outdo one another at this important skill. Love for good literature was instilled by the teacher's reading to us, at the close of Friday afternoons, selections of a continued story from the classics. One of these, perhaps in an abbreviated version, was Victor Hugo's *Lès Misérables* about an impoverished Frenchman who was sentenced to the galleys for stealing a loaf of bread.

Our history education was restricted to American history. It began with Columbus and ended with Franklin

Roosevelt. The first century of this era concentrated on learning all the major discoverers and explorers connected with the western hemisphere, their names, the nature of their discovery or exploration, and the year it occurred. The colonial history of the next century was occupied with the first thirteen colonies, learning the founders' names, years of founding, and reasons for founding. In subsequent American history, we had to know the presidents, their years in office, and the chief events during each administration. For good measure, with all of this we committed to memory a list of America's most important inventors from Robert Fulton and Eli Whitney to the Wright brothers, together with the year and nature of the invention; also a separate list of America's wars, their duration, their causes and consequences; also another list of foreign territories

America acquired through wars, as a gift, or by purchase.

Our geography exercises were no less challenging and memorable. All six continents came into our purview. Each continent's land and water boundaries needed to be memorized, as well as the earth's major islands. Each continent's sovereign nations, together with their respective capitals and major cities, had to be known. Thus, I have no trouble recalling that Chile's capital is Santiago and its major cities Valparaiso, Concepcion, Antofagasta, and Iquique. That last city's name and pronunciation must have endeared Chile to me. We also were required to define terms such as island, lake, peninsula, bay, isthmus, and strait.

For the geography of America we had to know all the states, their capitals, their chief cities and resources, as well as America's major landforms such as



The author's eighth grade graduation class. The author is third from the right in the back row.

mountains, deserts, rivers, and the Great Lakes. In Wisconsin, we had to know the major cities, their populations, and their chief industries. Thus Milwaukee was associated with manufacture of heavy machinery and beer. And lest it be overlooked, all of geography's proper nouns had to be correctly spelled.

Except for mathematics, there was nothing outstandingly different about Mr. Hackbarth's treatment of civics, penmanship, art, and science. Facility with numbers, however, was instilled in a variety of interesting ways. Besides the usual word problems, such as money spent for various grocery items or cost of supplies to paint or wallpaper a room of given dimensions, the unique feature of our training with figures concerned mental multiplication and speed addition. For the former exercise, we were told to put our hands behind our back, then given a set of two-digit numbers such as 74 x 69 to compute in our heads and, when done, to write the product on the sheet of paper on our desk. This exercise was designed not for competition but to stimulate our powers of concentration. The speed addition exercise, however, appealed to our love of gamesmanship. It certainly improved our facility at this kind of arithmetic besides being great competition. The game was announced about once a month—"today we'll add"—and ran over a space of 15 to 20 minutes. Mr. Hackbarth dictated, at maximum speed (there was a good reason for the speed), a series of eight five-digit numbers for us to add as quickly as possible. Whoever finished

first rushed up to his desk, put his paper on the teacher's desk, and moved around his chair to head up the long line of students which, following the first student's path around the teacher's chair, formed along two walls of the room, the second person giving his paper to the first, the third to the second, and so on. The noise of feet running on the floor must have been disturbing to the classroom below, but we

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Argument pursued from a weak fund of knowledge, or from a total void, lapses into an exchange of ignorance.

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never gave that a thought. At a given time limit — perhaps two or three minutes — the correct answer was announced. The first to have it right got a score of 100, the next a 95, the next two a 90, the next three an 85, and so on.

As early as the sixth grade and continuing to the eighth grade, the same boy in my class was almost always first in line. In eighth grade, he divulged his secret to me. By the time the teacher had completed his dictation (there was

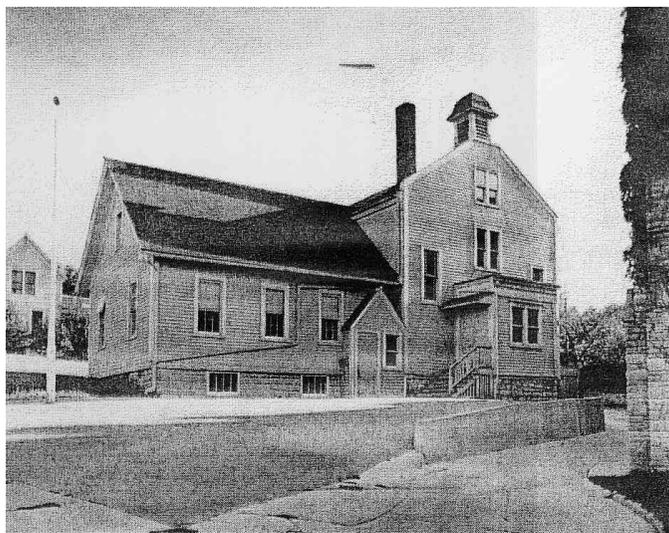
a reason for the speed!), this boy had already finished adding the column at the far right. Thus he enjoyed a five to ten second head start on the rest of us. Memory of competitions won at this enjoyable game has long faded into oblivion, but not its educational value. It was a fun method of improving our facility with numbers, and it has remained one of my cherished learning experiences with Mr.

Hackbarth. Another was his joining us during the springtime weeks, after we had eaten our noon packed lunches, at our game of softball on an adjoining empty lot. We chose sides, and he was the perpetual pitcher for both sides. This did not begin until our class was in the eighth grade, and then it lasted only until he broke his finger while fielding a throw

to first base. We were sorry to lose his companionship. My father, a few years his junior at our synodical school in Watertown, Wisconsin, told me that Mr. Hackbarth had been a crack baseball player during his student years. His joining us out of doors in our recreation, brief though it was, added another dimension to our love and respect for this teacher.

Many facets of educational experiences through the years of my youth have grown dim with time. An excep-

tion would be what I remember from sixth through eighth grade. These are impressionable years, to be sure, but a master teacher at any grade level can heighten the good recollections immeasurably. Thus, in my own ministry as an educator at our college in New Ulm, Minnesota, I made it a regular habit to share this truth with my senior level students about to enter the same ministry.



As teachers they can exercise much influence for good on children committed to their care. Teaching at the elementary level, or at any level, is a high and precious calling.

Reflecting on Mr. Hackbarth's teaching methods, one might question them for overmuch emphasis on the kind of mindless rote learning that goes on among the madrasas of Islam. Of what practical value, for example, is it to know, and spell correctly, the cities of

Conception, Antofagasta, and Iquique in Chile? And why need mental exercises in arithmetic consume classroom time any longer when nowadays children are equipped with calculators to do the thinking for them. The same holds for committing information to memory about history, geography, and so on. The facts are now so readily available on the computer. Perhaps the argument could spill over into memorization of Bible passages and hymns as well.

Given today's technology, those seemingly ancient educational methods of the past do have continuing value. They exercise the mind by training it in concentration and quick thinking. They exercise the memory, furnishing it with a fund of knowledge immediately available without recourse to outside help. What a blessing when it comes to hymns and Bible passages! A fund of immediate knowledge is also vital for those higher aspects of education, which require the give and take of argument and debate. When papal champion Dr. John Eck of the University of Ingolstadt near Munich debated at Leipzig in 1519 with Dr. Andreas Carlstadt and Dr. Martin Luther of Wittenberg University, Carlstadt was constantly referring to the mass of books at his elbow to support his position whereas Luther, like the opponent, had the facts at his fingertips.

Argument pursued from a weak fund of knowledge, or from a total void, lapses into an exchange of ignorance. Even a natural familiarity with cities and landforms around the globe makes reading

or hearing about places and peoples in foreign lands more satisfying and enjoyable. It distinguishes a well-educated person.

Furthermore, Mr. Hackbarth's teaching methods did not lack challenges to reasoned thinking as well as creative thinking. Reasoned thinking was given exercise in the mathematical word problems assigned, in diagramming long and complicated sentences, and in tests which required application of spiritual truths. His composition assignments, in their unexpected variety, certainly demanded creative thinking. And the knowledge itself acquired from his methods equipped his pupils so much more adequately for the greater challenges to reasoned and creative thinking in their future education. To regard Mr. Hackbarth's teaching methods as out of date misses the truth completely.

In reviewing the now perceived halcyon years under this teacher, I have one large regret. During those many years after graduation from eighth grade, I failed to seek him out in order to renew acquaintance with him. It would have been a golden opportunity for me, as an adult with a better sense of values, to express my appreciation for all that he did toward shaping my future. His expertise as a master teacher made the path so much easier through the years of my later education. It remains a regret that can no longer be mended in this life.

Theodore J. Hartwig is professor emeritus of Martin Luther College, New Ulm, MN.

The Design of God in a Rose

An exploration into organic chemistry

Kevin Glaeske

The heavens declare the glory of God; the skies proclaim the work of his hands (Ps 19:1).

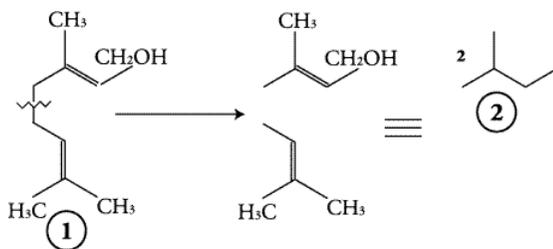
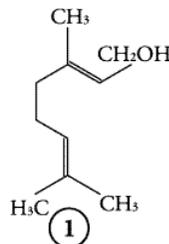
The above verse is often used as a proof passage for the evidence of creation. All anyone has to do is open his eyes and peer into the deep night sky to see the wonderment of the universe. This goes for Christian and non-Christian alike. In the course of my adult life, I have explored the wonderment of God's creation. Instead of gazing deep into the far reaches of space, my inquiries have been much closer to home. Sometimes this exploration takes me a distance no further than the flowerbed.

In this essay I wish to examine God's design, not so much for its complexity, but rather for its simplicity. In order to do this I will with the aid of my background as an organic chemist put forth a solitary, simple rose.

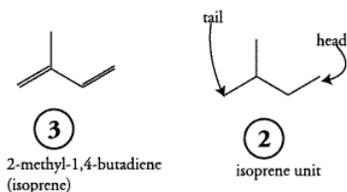
An organic chemist would want to isolate the chemical responsible for producing its pleasant aroma. To accomplish this I would take the petals of a dozen roses and boil them in a suitable solvent in order to extract the desired compound.

(I know this is destroying a pretty flower, but such is science and I have a point to prove.) After suitable purification I would have at my disposal (hopefully) a viscous, colorless syrup known as geraniol (1).¹

Geraniol ($C_{10}H_{18}O$) upon further inspection can be broken down even further into two pieces of five carbons apiece (Equation 1). Now in these two pieces lie the heart of the matter. These five carbon fragments are known as isoprene units (2) after the similar compound 2-methyl-1,3-butadiene (3), more commonly known as isoprene (Equation 1).



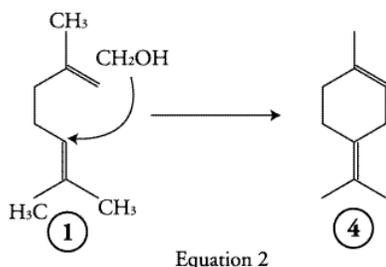
Equation 1



role within God's creation. They combine to form a class of compounds known as terpenes. Terpenes serve nature by providing aroma for almost all plants and trees. Most commonly isoprene units are connected head to tail, but, as we shall see, they can connect head to head or tail to tail. In some instances isoprene units can be cross-linked as well.

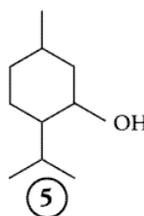
If I start with geraniol and form a bond between two of the carbons and remove the oxygen group (Equation 2), I would have a new compound, limonene (4). Limonene is found in the skins of oranges, limes, and lemons providing the citrus smell of these fruits.

Taking this new compound and manipulating the carbon skeleton by removing the double bonds and adding



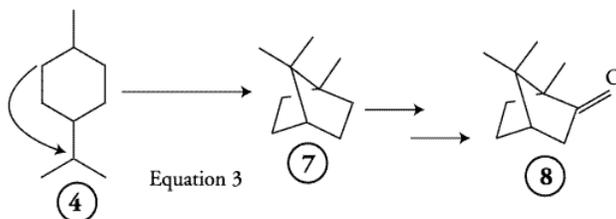
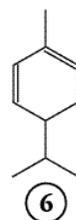
a hydroxyl (-OH) group, one would have menthol (5) or the familiar scent

of peppermint.



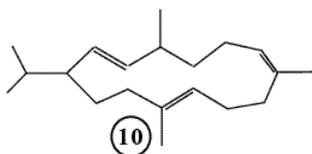
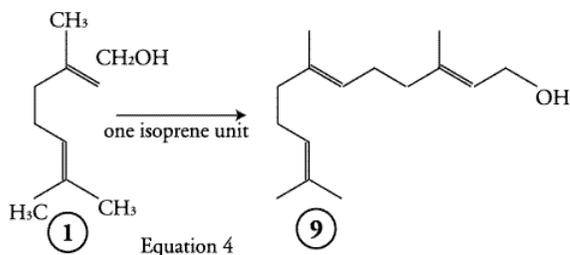
skeleton would now provide the mild scent of α -phellandrene or eucalyptus (6).

The fun does not end here. If the skeleton of limonene is further cross-linked, (Equation 3) I now have a bicyclic structure (7), which upon addition of a carbon oxygen dou-



ble bond, now gives hope to single young women³ as the essential oil camphor (8).

Even with just two isoprene units, one can account for some particularly pleasing aromas, but adding more isoprene units can make many other compounds. The addition of one isoprene unit to geraniol gives one the very common aroma found in churches every spring in farnesol (9), which is found in Easter lilies (Equation 4). A fourth isoprene unit (can you find them all?) will pro-



vide cembrene (10) or the essential oil found in pinewood.

One interesting thing to consider about farnesol is its composition of three isoprene units. Terpenes made up of three isoprene units are known as sesquiterpenes and make up the bulk of terpenes found in nature. At Easter this chemist wonders if our Triune God is leaving a Trinitarian signature over his creation. We cannot know for sure, and I am not looking for a sign or compelling proof from God's design. Moreover, I also have to be careful since my science could very well be wrong and my inferences could contain bias. There are things that are "too wonderful" for us to consider while on earth (Job 42:3). I will have to wait until the glory of heaven before I can get the answer to this question.

As I have stated earlier, many of the compounds used to provide the pretty scents in nature are terpenes. The defining factor of these terpenes is that they can all be reduced to a straight-forward structural unit known as an iso-

prene unit. From this short essay we have seen that from these seemingly simple carbon pieces God has carved out a big niche in nature for these "simply" derived compounds. This is just one thing to consider as you stop and smell the roses.

NOTES

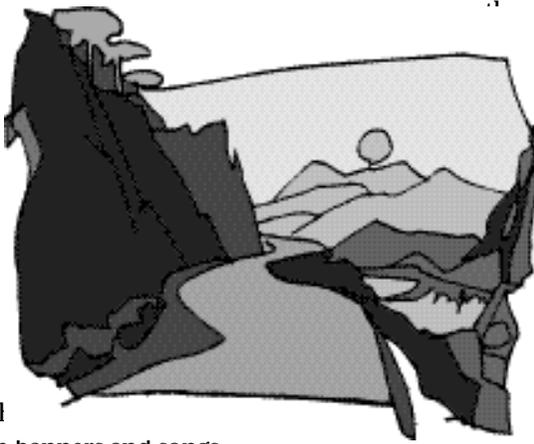
- ¹ It should be noted the convention for drawing organic molecules has a carbon atom at the end of a line or at the corner of two lines (e.g. — would be $\text{CH}_3\text{-CH}_3$). Multiple lines indicate multiple bonds (e.g. = would be the same as $\text{CH}_2=\text{CH}_2$). So in the case of geraniol, it is an eight carbon chain containing two carbon-carbon double bonds.
- ² For an easy way to isolate limonene from orange or lime peels, please see "Making Sense of Terpenes: An exploration into biological chemistry," Glaeske, K.W.; Boehlke, P.R., *Am. Bio. Teacher*, 2002, 64, 154.
- ³ The reference here refers to young women having hope chests made out of cedar wood. Camphor helps give cedar wood its pleasant smell.

Dr. Kevin Glaeske teaches chemistry at Wisconsin Lutheran College, Milwaukee, Wisconsin.

A Harrowing Bus Ride

Theodore Hartwig

THAT TRIP (1988) brings to mind the one we lived through in 1982, the only one of all nine tours which can justly be labeled harrowing. It happened on the day after a July 4 which



ded its way over a high mountain pass overlooking the Bay of Naples. It was a narrow two-lane road hugging the edge of the mountain at the right and, at the left, overlooking, without guardrails, the sheer cliffs that dropped down several thousand feet

we celebrated with banners and songs on shipboard crossing the Adriatic through the night from Patrai on the north coast of the Peloponnesus in Greece to the port of Brindisi in south-eastern Italy. On the morning of the 5th, we received word on the ship of an earthquake-caused landslide near the Bay of Naples which blocked the direct highway to our destination at Sorrento. In our behalf, the ship's purser wired ahead to inform the hotel at Sorrento that, since we would be detoured by way of a longer roundabout road coming from Amalfi to the south, our arrival at the hotel would be late. Little did we then realize that this detour would take us, not along a sea level route but on the spine-tingling Amalfi Drive which

to the Mediterranean Sea below. Fortunately, the night was balmy and beautiful, an overhead full moon reflecting its light on the quiet sea waters far below. Unfortunately, however, there were some five to six very sharp curves along the road, which were not at all made to accommodate our 55-passenger coach, the largest in the bus owner's fleet. Indeed, a bus of our size had no business on that road. At every one of the curves, we two leaders had to step out of the bus, one at its front, the other at the back, giving directions to help our driver negotiate the curves by shifting forward and backward a number of times while hugging the inner rock face at the right as closely as possi-

ble, so closely that at one curve the right back window was deeply scratched by the sharp rock. As the bus rounded each of these tight, no-guard-railed curves, its front floated out over the left edge of the cliff, giving a view of the sea directly underneath and frightening the passengers who sat at the front, so that several of them, overcome by nausea, had to retreat to the back of the bus. Some were sure we would never survive this trip. Even more distressing to everyone in the coach, while in the middle of one of these curves, our driver, Albin Frank, stopped the bus and, with hands on the steering wheel and head on his hands, exclaimed, "Ich kann nicht weiter" (I can't go any further). As if this was not trial enough, the narrow mountain road was choked with the motorcycles and small cars of jubilant Italians. Celebrating that night their country's victory over perennial powerhouse Brazil in the semi-final world cup soccer matches, they kept honking at our slow moving bus bringing all traffic to a halt at the curves and then scooted around it when the road was momentarily clear. After 3? hours of this ordeal, we arrived in a state of mental exhaustion, Albin more than anyone else, at the truly regal Sorrento Palace hotel at 1 a.m. There, to our amazement, we were greeted by a lavish lunch laid out for us in a beautiful dining room and served by a corps of sympathetic and attentive formally dressed male waiters. It was a never-to-be-forgotten experience, destined to frequent telling and re-telling, which allowed our entire company of 55 students, two leaders, and the driver to

regard ourselves as the Amalfi survivors.

The story would not be complete if its sequel were missing. On the evening of July 25, our last day in Europe, we celebrated our usual farewell party at Cochem on the Mosel River. For this party, one of our students, Timothy Buelow, prepared a diploma for presentation to our coach driver in grateful acknowledgement for bringing us safely through that terrifying ordeal on the Amalfi Drive. In beautiful Gothic lettering, the framed diploma was formally presented to him in the presence of our entire group. It declared that Albin Frank was herewith officially awarded a PhD in the profession of coach driving.

This excerpt is from Potpourri of Reminiscences, a recounting of the international tours led by Professor Hartwig from 1972 to 1989. The entire document is available on the MLC website (www.mlc-wels.edu) under The Lutheran Educator tab.



WELSSA

LeDell D. Plath

WELSSA = Wisconsin Evangelical Lutheran Synod School Accreditation. In 2003 this new ministry effort was approved by the WELS Board for Parish Services who designated the Commission on Parish Schools (CPS) as the WELS school accrediting agency.

The concept of school accreditation is not new to WELS schools. About 30 WELS schools have completed a self-study, hosted a visiting team, and received accreditation from a state recognized agency. Also in the nineties the CPS developed a set of standards which schools could use to examine themselves through a self-study. Up to this time, however, WELS did not have its own accrediting agency. With the advent of WELSSA this has changed.

CPS - the WELS Accrediting Agency

WELSSA resembles numerous other school accrediting agencies. The agency governs the entire accreditation operation. For WELS the CPS is the accrediting agency and is responsible for the following:

- Establish and administer all policies of WELSSA
- Appoint the Executive Director of

WELSSA, establish his position description, and annually assess his ministry

- Pay appropriate honoraria to WELSSA consultants
- Evaluate and improve WELSSA
- Promote WELSSA and its benefits throughout WELS
- Publish appropriate materials and resources for implementing WELSSA
- Work closely with the district Parish Schools Coordinators (PSCs)

Rationale for WELSSA

Even though the CPS in the past considered establishing our own WELS accrediting agency, the time was not right. Why now?

This past 18 months the CPS has aggressively promoted Challenge 2010. A major thrust of that ministry effort is school improvement. All associated with a WELS school are deeply committed to having the very best school possible. That attitude is an outgrowth of our commitment to serving our Lord out of gratitude for the blessings he has given us.

Self evaluation through a rigorous

self-study is one of the most effective ways to improve the quality of a school's ministry. The benefits of completing the process of school accreditation that includes a self-study are these:

- Helps the school recognize and maintain the multitude of blessings, including all of its strengths, it has received from God
- Helps the school identify which areas of ministry it needs to work on so that it better serves God, the congregation, and the community
- Involves a large number of interested people and this increases their knowledge of, understanding of, and commitment to the school

After a school has achieved WELSSA accreditation, it can look forward to these benefits:

- Recognition by WELS as an accredited school carries with it a high level of credibility. Being accredited through WELSSA, which has received candidacy status from the National Council for Private School Accreditation, carries with it additional credibility. This accreditation will likely be helpful as a school encourages its congregation members to enroll their children. This would be especially helpful as WELS schools seek to reach out to the families in the community who likely have little or no knowledge of WELS or WELS schools.
- WELS schools can support and encourage one another through WELSSA.
- Accreditation has proven to be important as a school seeks grants

and employer matching gifts to assist with funding special programs.

Field Test

The CPS has developed the WELSSA Handbook that contains all WELSSA policies and all necessary information a school needs to proceed through the WELSSA process. Because quality is of prime importance and because this process is new to WELS schools and to the CPS, WELSSA is being field tested over the next two years.

Twenty-eight WELS elementary and high schools volunteered to participate in the field test. The CPS oriented and trained the principals of these schools in the WELSSA process in a two-day workshop in January 2004.

That workshop served two other functions: consultants and team captains numbering 22 were also trained, and the schools and their consultants began the planning necessary for the schools to reach their goal of WELSSA accreditation.

As of this writing three schools have been approved for candidacy status. This means that they have demonstrated that achieving accreditation is well within their grasp.

During and after the field test the CPS will gather information from all participants in the field test with one goal in mind—to improve WELSSA.

WELSSA Process

The WELSSA accrediting process is

similar to that of other accrediting agencies. A school follows these steps to achieve WELSSA accreditation.

- Approves pursuing accreditation
- Studies the benefits and process for achieving WELSSA accreditation.
- Requests a consultant be appointed to the school
- Applies for candidacy status, pays the fee
- Does a self-study using the WELSSA's Ten Self-Study Standards
- Completes a school self-study report
- Hosts a visiting team who validates the school's self-study report
- Receives accreditation upon recommendation of the visiting team, the district Parish Schools Coordinator, and the WELSSA Executive Director
- Develops a school improvement plan based on the visiting team's report
- Submits an annual report which demonstrates progress in the school's improvement plan

Details - WELSSA Process

Providing some details will improve your understanding of WELSSA. As soon as a school begins work on the WELSSA process, a trained consultant assists and encourages them.

WELSSA's Ten Self-Study Standards help the school evaluate every aspect of its ministry. A Steering Committee and several sub-committees, which are made up of school personnel and members from the congregation, assess each of the 200+ items included in the Ten Self-Study Standards to determine the

school's level of achievement for each item. The assessments of all sub-committees are used to develop the School's Self-Study Report. That report is submitted to the Visiting Team, which has been appointed by the Executive Director of WELSSA.

The Visiting Team spends several days at a school in an onsite visit. During this visit they validate the School's Self-Study Report. One of the main questions the team asks is, "Does the school have a well-defined mission statement and is it striving to achieve that mission in all that it does?" The team further validates the School's Self-Study Report by interviewing school personnel, observing the school and classrooms in action, and by studying a variety of school documents and resources.

At the conclusion of its visit the team presents an oral report of its findings to a gathering of interested school people. During this oral report the team shares some basic information about its findings and relates what it will recommend regarding the school's accreditation status.

Following the on-site visit the team prepares its detailed written report, which is forwarded, to the school, the district Parish Schools Coordinator, and to the WELSSA Executive Director. The Executive Director presents the team's recommendation to the CPS who makes the final decision regarding a school's accreditation.

After receiving accreditation the school is expected to submit an annual report to the CPS. This report shows the

progress the school has made on its improvement plan.

To maintain its accreditation status, a school must do a self-study and host a visiting team every seven years.

Credibility

As indicated earlier the CPS is deeply concerned about helping WELS schools improve their ministry. If that is to be accomplished, WELSSA must have a high level of credibility within WELS and in the education community. To ensure this credibility the CPS has developed a rigorous process of school accreditation through WELSSA. The Ten Self-Study Standards, when used as intended, thoroughly evaluate every aspect of a school's ministry. Other elements of the WELSSA process help to achieve credibility: trained consultants, trained team captains, thorough onsite visit by a qualified team of educators, annual reporting of school improvement by the school, and the expectation that a school does a self-study and hosts a visiting team every seven years.

To further ensure credibility the CPS has sought recognition from the National Council for Private School Accreditation (NCPSA). The NCPSA is a national entity that serves as an accrediting association of private school accrediting agencies. It is "dedicated to the distinctives of the private school sector and based on external standards of excellence and credibility as fulfilled by voluntary peer recognition—the basic concept and rationale of accreditation" (NCPSA Introductory Information and

Directory 2001, p.2). Fourteen private school accrediting agencies are recognized members of the NCPSA.

The CPS submitted the WELSSA Handbook to the NCPSA in 2003. After scrutinizing WELSSA policies and procedures the NCPSA granted WELSSA Candidate status in their organization.

As part of the process that NCPSA uses to determine if WELSSA meets their standards, they have assigned a consultant to work with the CPS during the field test of WELSSA. This consultant will examine the WELSSA field test process, peruse the record keeping system, accompany a visiting team to an onsite visit, and be present at a meeting of the CPS when it decides on a school's accreditation status. Following those activities the consultant will present a recommendation to the NCPSA regarding the WELSSA status.

The NCPSA is a member of The Commission on International and Trans-Regional Accreditation (CITA). Membership status in the NCPSA would give our accredited schools the benefits provided by CITA. Being listed on The International Registry of Accredited Schools would be one of those benefits. This registry is used world-wide by various individuals, colleges, universities, and businesses to verify a school's accredited status. The North Central Association of Colleges and Schools, that agency which accredited Martin Luther College, is a member of CITA.

Membership in the NCPSA and CITA has exciting potential for doing mission work in foreign countries through WELS schools.

Opportunities - Open Doors

A second thrust of Challenge 2010 is encouraging our schools to reach out to the unchurched. A critical element in that effort is the quality of our schools' ministries. Unchurched families desire to enroll their children in a school that has demonstrated concern for quality and has achieved that goal. It is quite typical that when a new family in a neighborhood is seeking information about which school to enroll their children, they ask this question: "Is your school accredited?" To that family being accredited is an indication of quality. An open door for outreach? Definitely!

It seems the Lord is opening additional doors. A previous paragraph describes the advantage of membership in CITA. Representatives of NCPSA and CITA have shared with WELSSA representatives that many foreign countries eagerly seek organizations to open quality schools in their nations. We need to

be ready to walk through those doors when the Lord opens them for us.

More Information

When learning of WELSSA several WELS schools who are not part of the field test have inquired about pursuing WELSSA accreditation now. That option is open to any WELS school. Should a school desire more information about WELSSA, you may use one of the following means of doing so:

- Phone: Jim Brandt, 414/256-3221 or Lee Plath, 262/514-3407
- Email: jimbr@sab.wels.net or ldplath@wels.net

The CPS has developed the WELSSA Handbook especially focusing on elementary schools. Work is currently being done for accrediting Lutheran high schools and early childhood ministries.

LeDell D. Plath is the Interim Executive Director of WELSSA.

WELS FACTOID

Highest Degree Earned by Private and Public School Teachers

Affiliation	Total Teachers	Bachelors	Masters
Catholic	137,000	61.0%	31.9%
LC-MS	13,000	68.0%	28.2%
Episcopal	8800	49.3%	49.3%
Seventh Day Adventist	4300	53.4%	37.7%
WELS	1900	85.1%	11.6%
Friends	1500	46.5%	44.4%
Nonsectarian private	57,200	52.7%	37.8%
Public	2,727,000	52.0%	42.0%

National Center for Education Statistics, School and Staffing Survey, 1999-2000

Me and the Spirit

Philip Leyrer

For God did not give us a spirit of timidity, but a spirit of power, of love and of self-discipline. So do not be ashamed to testify about our Lord, or ashamed of me his prisoner. 2 Timothy 1:6-12

People in many different professions follow the practice of framing their diplomas and then hanging them in their offices. Aren't we, after all, somewhat comforted to see our doctor's diplomas on the wall as we await his treatment?

Christians, too, in all walks of life may hang diplomas as proof of training. But an even more worthy and important document might also hang in our offices, studies, classrooms and workplaces—our certificates of baptism.

Finally our call to faith is what qualifies us for everything else we do in life. All God-pleasing professions are noble, and when we bring our faith to our work we honor the Lord who gave us our faith and we are the salt and light that Jesus spoke of.

At our baptisms the Holy Spirit took up residence in our hearts and his presence affects us from the inside out. You know the way some people have that ability to light up a room. Where they live, a certain spirit of enthusiasm or fun or optimism is pervasive. The people around them are lifted, and their hope-

ful outlook becomes contagious.

In larger terms, such an atmosphere, such a spirit dwells in us because the Holy Spirit lives there. And in our text Paul helps Timothy and us understand what kind of influence and affect this spirit has.

Recall that Timothy was one who probably suffered from a lack of self-confidence. Put another way, Timothy listened too closely to his fears. For him and for us Paul lays out just what this spirit he has—and we have—is and is not.

“For God did not give us a spirit of timidity, but a spirit of power, of love and of self-discipline.”

This spirit we have is not timid. Yes, plenty of things scare us: heights, or things that go bump in the night, or tornado warnings or growling dogs. But Paul is talking here about our spirit of faith. Our ability to confess Christ, our desire to live according to his will need not be timid, even though we might be.

If Timothy was one to listen to his fears, how critical these words are: “For God did not give us a spirit of timidity.” Elsewhere in Scripture this timidity refers to fear in the face of a person who holds great authority or the fear that comes from being rejected. Maybe Timothy had difficulty witnessing to

strong personalities and maybe he was too reserved in talking about his faith because he was afraid of causing conflict.

But that was Timothy. That was not the spirit God gave to Timothy. Do we see the difference? This is not unlike a disappointed parent who has just caught his child using foul language. And he says, "You certainly didn't learn those words at home?" In other words, you have chosen behavior that runs contrary to how we raised you.

And so I may have trouble telling my strong-willed boss that church is a priority for me, and I may have trouble telling my friends I can't join them in their unchristian behavior, and I may have trouble telling the person in the seat next to me who is obviously in distress about a Savior who cares for her, and I may be afraid to stop my sinful flesh from over-indulging, but that is me, not the spirit God has given me. That spirit is quite different.

It is, our text says, a spirit of power. This is God's power. And you know what God's power can do. It called Lazarus forward from the grave. It was on display Easter morning. It broke Peter free from prison. And, as Paul says in our text, "by the power of God, who has saved us and called us to a holy life." This is the power that called us from spiritual death to life at our baptisms.

This power marks the spirit in us. When we share our faith, we share this power. When we witness to Christ's name we bring this power forward whether or not we see results. Standing with and for Jesus is not something we

have to do obnoxiously or with great fanfare. We can do it quietly and confidently. But standing with and for Jesus is not something for which we should apologize either, as if our Lord is some great inconvenience to us and others.

Second, this is a spirit of love. In our timidity, we might hesitate to show love because we are afraid it will make us appear weak, What will he think of me if I bring him a can of soda for no reason? And we will use sarcasm and ridicule on one another and then justify it by saying, "Well, that's just the way we communicate." But, again, that's us; it is not the spirit in us. That spirit is not afraid to be kind because Jesus has been kind. That spirit is generous because our Lord has been so generous to us.

Finally, this is a spirit of self-discipline. Self-control and prudence are suggested here. When I am timid I may not set limits for myself. When I am timid I may abandon reason and let a whole bunch of insecurities unsettle me. That is me; that is not the spirit I have been given. The spirit of self-discipline applies God's word evangelically. The spirit of self-discipline helps me find center in Christ at those times when I am riddled with self-doubt.

How marvelously this spirit was on display in the Apostle Paul as he sat in prison. He was not afraid of his captors and he was not afraid to die. Though his body was restrained by chains he knew the power of his spirit and so he witnessed to the end to any who would listen. In love he put others ahead of himself and reached out to Timothy and the church through this letter of

encouragement and despite his imprisonment he had the self-discipline to keep from despair knowing his God had not left him and would soon call him home.

Such a spirit is ours, and timidity is no part of it. So will we listen to our fears or to the spirit of power and love and self-discipline? If you knew how to administer the Heimlich maneuver and a person who was choking stood in front of you gasping for air, would you listen to your fears? Would you think, "You know, to help this person I'm going to have to put my arms around him, and I really wouldn't want him to get the wrong idea." Would you think, "She's pretty nicely dressed and I wouldn't want to make a mess of her outfit."

The illustration is oversimplistic and

doesn't fit a whole bunch of situations we find ourselves in, but the question remains. Will we listen to our fears instead of the spirit of power and of love and of self-discipline?

Christ, our Head and Master, was not ashamed of us, and he goes with us every step of every day. Let us ask him regularly to put our fears in perspective and to concentrate on the spirit we have been given—the spirit of power and of love and of self-discipline. And then may we have the confidence of the Apostle Paul who encourages us: "So do not be ashamed to testify about our Lord."

Philip Leyrer is Vice President for Enrollment Management at Martin Luther College, New Ulm, Minnesota.

Easter

Sing, soul of mine, this day of days.

The Lord has risen.

Toward the sunrising set thy face.

The Lord has risen.

Behold he giveth strength and grace;

For darkness, light; for mourning, praise;

For sin, his holiness; for conflict, peace.

Arise, O soul, this Easter Day!

Forget the tomb of yesterday,

For thou from bondage art set free;

Thou sharest in his victory

And life eternal is for thee,

Because the Lord is risen.

AUTHOR UNKNOWN

The L Speaks!

Paul L. Willems

IT WAS ONE OF THOSE strange winter days in the classroom. The students had just come back from a “snow day,” a day off because of a snowstorm in the area. They were elated because it was beginning to snow again. They were also excited about the intramural basketball games played earlier that morning before school began. Their exuberance carried over into the classroom and prevented the start of the lesson. They were agitated. They were noisily chatting to one another. “Please calm down,” I said. The noise level increased. The teacher talks funny. What a hoot! “Caam down? You mean Cal-m down,” Jenna said. “No,” I replied. “I said, and I mean, ‘Calm down.’”

Has this happened in your classroom? It has happened many times in mine. I just passed over the student’s pronunciation problem until that snowy day. They were pronouncing the “l” in words like calm and palm. These letters are silent, you know. My students were amazed at my ignorance of the English language. “There’s an ‘l’ in cal-m,” they said. “You have to say it.” “Do you?” I asked. “How about the ‘p’ at the start of pneumonia? What about the ‘w’ in answer.” “Those are different,” my students insisted. “Those letters are silent, but you have to pronounce the ‘l’ in

cal-m.” After discussing other silent letters in words, such as the “k” in knife and the “w” in sword, I suggested we look to the dictionary as our guide in pronouncing “calm.” They were mortified at what they found. Calm and palm are pronounced with a silent “l.” The letter “l” is not to be voiced in calm and palm. Being the kind of day it was, the students went merrily on their way and decided to continue to pronounce cal-m their own way anyhow.

Is the English language changing? I remember the struggle my elementary teachers had with the word “ain’t.” We were forbidden to use it. “That is not a word,” we were told. I do not forbid the use of “ain’t” in my classroom, nor do I insist on “may I” rather than “can I.” English is a living language. It is in constant flux. It has and it will change. Check your dictionary for “all right.” I was taught to spell this word just as I spelled “all wrong.” It was two words, not one. Now dictionaries commonly give the spelling “alright” as a correct alternative to the old way of spelling all right. “A lot” is also two words. Spelling is one thing, but what about pronunciations? Is it to be “cal-m”? If you listen to many pastors as they read from Scriptures, some will tell you they are reading from the book of “sal-ms.” Is the “l” learning to speak?

I can anticipate “tal-king” about other changes in the English language. We might do just that as we “wal-k” along the path by the “pal-m” trees that sway even when the wind is “cal-m.” While this silent “l” that speaks may just be a local colloquialism, it may become a real change in our language. We may be experiencing a revolution in our mother tongue. What excitement! What a

thrill, just as in the days of William Shakespeare, to be a witness to changes in the English language. We may be hearing history in the making right in our classrooms.

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A Child's Offering

The wise may bring their learning,
The rich may bring their wealth,
And some may bring their greatness,
And some bring strength and health;
We, too, would bring our treasures
To offer to the king;
We have no wealth or learning;
What shall we children bring?

We'll bring Him hearts that love Him;
We'll bring Him thankful praise,
And young souls meekly striving
To walk in holy ways;
And these shall be our treasurers
We offer to the king,
And these are gifts that even
The poorest child may bring.

We'll bring the little duties
We have to do each day;
We'll try our best to please Him,
At home, at school, at play:
And better are these treasures
To offer to our King,
Than richest gifts without them;
Yet these a child may bring

AUTHOR UNKNOWN

Making the Classroom into a Muckhole

David Sellnow

A review of Janovy, John, Jr. *Teaching in Eden: Lessons from Cedar Point*. New York: RoutledgeFalmer, 2003. Bibliography, index. ISBN 0-415-94667-0, paperback, 187 pages, \$22.95.

I still remember a grade school field trip to the municipal water treatment plant. Maybe it's due to the staying power of raw sewage ... but it is also the case that powerful learning takes place whenever a subject is studied up close where it can be seen, felt, smelled. That premise is what has prompted educators like biologist John Janovy and colleagues at the University of Nebraska, Lincoln, to get students deeply involved in field research at a remote place called Cedar Point Biological Station. Using subjects such as parasitology, Janovy unleashes student potential by putting them in direct contact with their subject in its own messy environment, not the tidy confines of the lab. Dr. Janovy contends that it is a "fundamental principle of teaching ... that students must—must—have the real stuff. And if you don't have it at your immediate disposal, then you have to figure out how to make it, or find it in places where it's not supposed to be" (17). He

devotes much of this book to the challenge of finding ways to make in-the-classroom experiences more real, more tangible. You can't always take students to the muckhole to study microscopic life. But, if you're creative, Janovy contends, you can make the classroom into a muckhole (and that's a good thing).

Owing to his intention to get students hands-on with the real stuff of their field, Janovy is skeptical about trends toward web-based education. He accuses distance learning of being little more than "charging tuition and giving college credit for something anyone with a library card could do on his or her own for free" (76). He maintains that "there is no real stuff on the World Wide Web except, perhaps, for airline and hotel reservations" (17). What he senses most noticeably missing in information technology is context:

Sitting at your computer, you can get your words into the face of someone halfway around the world in an instant, but it might take a lifetime to understand that same person's worldview and you have no idea what his dinner smells like (76).

He is not enamored, either, with technologically savvy classrooms as a substi-

tute for thinking and communicating.

So here is the crux of my argument about education in general and higher ed in particular: people are the source of our accomplishments, not buildings, facilities, money, or computers. Human beings do wonderful things; buildings stand empty, sucking up energy, and computers devolve into screensaver mode, until a person decides—usually on his or her own volition—to walk inside, sit down,

“

Sitting at your computer, you can get your words into the face of someone halfway around the world in an instant, but it might take a lifetime to understand that same person's worldview and you have no idea what his dinner smells like.

”

and proceed to put substance to ideas (25).

Janovy even goes so far as to say that fine facilities with comfortable seats and air conditioning sometimes can impede learning; he obviously prefers the raw experience gained in the mud and sweat of the field station. But he recognizes that expedience calls for many courses to be taught in standard classroom settings. Therefore, applying his argument to put human inquisitiveness at the center of the learning process, Janovy shares ideas he has used in his traditional classroom to connect course content with real life. If education books were to be rated according to how many usable ideas for teaching they convey to the reader, this work gets high marks. In my notepages from reading, I can count more than twenty-five techniques, strategies, and methods that I want to try implementing in my teaching. From course design concepts to essay assignments to grading procedures, Janovy presents a panoply of possibilities. Absorbing a bit of his creativity in and of itself makes the book a worthwhile purchase.

Janovy speaks from a broad range of experience. His greatest joy clearly is found at Cedar Point in research courses with advanced students. But he also regularly teaches those gigantic college courses in introductory biology, with 300+ students at once in a lecture hall. And he has served in administrative positions for the university and its museum. Thus he is able to note the challenges and opportunities of higher education from several perspectives. He

insists on getting to know his students. (Even the 362 freshmen in Biology 101 are each invited to converse for a few minutes individually in his office.) He is unabashedly critical of colleagues who are reluctant to try anything novel. “They are too proud, too strangled by their paradigms ... too embarrassed to admit being unable to think of an idea” (127). He is similarly disparaging of administrators who are out of touch with what is really needed for learning to take place. Yet he is not a negative person; his comments against gainsayers are studied and thoughtful. A case in point: He contends that we want to produce students who are investigative, who ask good questions, who explore issues, who seek out problems for further research. But we teach in ways that present problems for which we already have solutions, and have the students follow tracks others have already traversed. Janovy analyzes the situation:

Because our entire educational system seems designed to produce problem-solvers instead of problem-seekers, perhaps we’ve managed to hide a lot of creative talent by not asking it to step forward, depending, instead, on those naturally inclined to challenge our prevailing paradigms. Thus, the purposeful production of good, or even habitual, questioners is a found problem in science teaching (88).

Science teaching is Janovy’s context for this book, but it is not a book about biology or only for biology teachers. Along the way, he avows his own insistence that science students take liberal arts courses because of their intrinsic

educational value. A modern-day Renaissance man, Janovy wants his students to be more than one-dimensional, exploring fine arts, for instance:

Art is not a frill, but an essential component of education even for a nascent scientist. Art is constant practice at reaching into our most elementary resources—our ideas and perceptions that are the essence of our humanity—and recording these resources using simple means (61).

Janovy describes essays he has assigned in biology that require also aptitudes in English and advanced composition. (He could be a poster boy for “writing across the curriculum.”) He seeks opportunities to apply his models and methods to other types of courses, particularly history and subjects in the humanities. In the end, for Janovy, it is all about learning how to learn, regardless of the subject. He wants us to “elevate our teaching and learning to a plane above the subject matter itself” (84), insisting that it is far more important to teach attributes than information. “And in the final analysis, there is no easier way to teach these attributes than to give our students some really wild plants or animals” (126) ... or in history, primary sources ... or in philosophy, letting them fully wrestle with a philosopher’s argument and its application (rather than merely summarizing in lectures what happened in history or what certain philosophers said). Janovy proposes a grand goal for teaching: Not that we teach biology, but that we teach students to act like biologists; not that

we teach history, but that we teach students to do what historians do, even if only for a semester. This, he contends, will make them better lifelong learners, whatever the field.

Not everybody likely will like everything Janovy says. [Maybe you don't even like what you've read so far in this review!] He takes predictable potshots at creationists, whom he calls "an army built on grand delusions" (140). As a scientist, he is strongly in the tradition of Francis Bacon—don't start with any pre-existing notions, don't let past authority dictate to you, make your own observations. As an educator, he is evidently a disciple of John Dewey, wanting students to learn in the context of practical application, not merely in the educationally "impoverished setting" of a row-upon-row standard classroom where

you "can never find ... real stuff in its proper context" (74). He devotes a chapter to his biological views of animal rights, which is too bland to win over any animal rights activists and too inane to interest anybody else.

All in all, however, *Teaching in Eden* achieves a purpose its author would be pleased to see. It will make you think about your teaching, brainstorm how better learning can take place, experiment with alternative ways of devising assignments. If a few more teachers attempt to bring some sort of a "swamp-in-a-jar" (80) of the real stuff of their subjects into their classrooms, for students to examine up close and directly, Janovy's educating effort will have been a success.

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