

Few times in our lives do we get the opportunity to meet and interact with someone who demonstrably changes things on even a state, let alone a national level. John Saxon was such an individual.

**Wayne Bishop, Ph.D., Professor of Mathematics,
California State University-Los Angeles, CA**

There was absolutely no phoniness about him. I even remember his wife once saying, "John is cursed with clarity."

Frank Wang, CEO, Saxon Publishing, 1994-2002

I never met John Saxon, but it was his program that showed most clearly just how badly the system is functioning. After all, the data showing that Saxon Math works—especially with at-risk students—is undeniable. So the almost fanatical resistance to using the program by the vast majority of this country's school systems is, in and of itself, the strongest indicator of the fact that the system is in deep trouble. The country owes John Saxon a huge debt.

R. James Milgram, Ph.D., Emeritus Professor of Mathematics, Stanford University

A 1949 West Point graduate, John Saxon was awarded the Distinguished Flying Cross as a combat pilot in the Korean War. He was a test pilot at Edwards Air Force Base from 1957-1962 and later taught at the U.S. Air Force Academy; he then served in Vietnam. Saxon held three degrees in engineering. As a math teacher, author, and publisher, he declared war on math education elites who supported the "fuzzy" math ideology. He also called them racist and sexist for saying girls and minorities couldn't learn math like "white males."



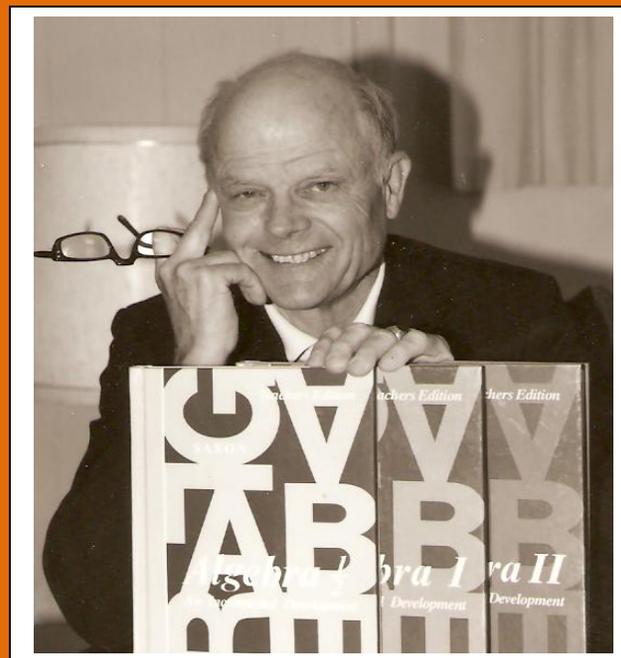
**John Saxon,
1923-1996**

John Saxon's Story, a genius of common sense in math education,
costs \$23.50 plus \$4 shipping and \$1.94 tax for Texans.

**All proceeds go to the West Point Association of Graduates,
Department of Mathematical Sciences General Fund,
698 Mills Road, West Point, New York 10996,
in honor of LTC John Saxon.**

Excerpts from...

John Saxon's Story



**a genius of common sense
in math education**

By Nakonia (Niki) Hayes

John Saxon's Story—a genius of common sense in math education

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To purchase the book, buyers can visit Amazon.com or <http://saxonmathwarrior.com>. In addition, a check or money order can be mailed to Saxon Math Warrior, P.O. Box 5034, Waco, TX 76708.

All proceeds from the book will be donated to the West Point Association of Graduates, Department of Mathematical Sciences General Fund, in honor of LTC John Saxon.

Donations in his name can also be made to that fund at 698 Mills Road, West Point, New York 10996.

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THREE PUP PRESS

From the book's Preface...

John Saxon was a man in a hurry and he didn't have time to play nice with people who had power over children's learning.

A reformist's values about math education curriculum:

"The new approaches are unverified, but plausible," said Prof. Alan Schoenfield in 1992 as he supported the National Council of Teachers of Mathematics (NCTM) unproven national standards.

"While we applaud those districts and teachers who say they are getting results from other programs [Saxon Math], effectiveness was not one of our criteria," said Susan Stickel, member of the state curriculum commission advising the California board on textbooks, 2001.

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Saxonisms

Results, not methodology, should be the basis of curriculum decisions. Results matter.

Mathematics is an arena of proof, but mathematics education seems to be an arena of well-intentioned but totally unproven guesses.

Fundamental knowledge is the basis of creativity. Creativity springs unsolicited from a well prepared mind. Creativity can be discouraged or encouraged, but creativity cannot be taught.

Problem solving is a process of concept recognition and concept application. Problem solving is merely the application of previously learned concepts. The “art” of problem solving cannot be taught.

Teachers say they are going to teach the children to think. The children can think already. What they need to know is the math to use in their thinking.

If it were possible to teach people to think, it would be possible to teach professors of mathematics education to be mathematicians. The only difference between a mathematician and a professor of mathematics education is the creative spark.

The use of productive thought patterns can be taught, but the act of “critical thinking” cannot be taught.

Students do not detest work; they detest effort without purpose.

Teachers are not paid to teach. Teachers are paid to find a way for students to learn. You do not teach mathematics with your head, but with your heart. Making eyes sparkle does not come from erudite mathematics.

Beautiful explanations do not lead to understanding.

The teacher’s job is to find a way to get them to do the homework. If they refuse to work the problems, then learning is impossible no matter how good the teacher is and no matter how good the book is.

I contend our job is to teach rewarding responses to mathematical stimuli, to teach thought patterns that have been found to lead to the solutions, to allow the students to practice reacting to the stimuli with these thought patterns and to be rewarded with the warm feeling of pride that accompanies the correct answer.

I believe that students should be gently led and constantly applauded for their efforts. I oppose intimidation in any form. Mathematics classes can become warm sanctuaries towards which students gravitate because there they are asked to solve puzzles by using familiar thought patterns.

You grasp an abstraction almost by osmosis through long-term exposure. You can’t put your hand on it. That’s the reason we call it an abstraction. We’ve never had research that shows how long it takes for students to absorb abstractions in mathematics. It takes a *long* time. Then the summer lets them forget it.

Meaningful education research is an oxymoron. We have more education research in America than all the other countries and kids are at the bottom. The math educators spend time at the universities playing like they’re scientists and they publish their papers.

Either I am the most brilliant thing to come down the pike, having doubled some students’ test scores, or the people in charge of math texts are totally incompetent.

We have allowed this fraud, this pasquinade, on education by these people who are literal and total gross incompetents, and they have destroyed mathematics education in America to the point that I, a retired Air Force test pilot who has flown two combat tours, and whose profession was killing, knows more about teaching than they do.

I know I don’t make headway by speaking out this way, but I am determined to change this system of math education. Our math experts aren’t really experts; they have abdicated all claim to control by their behavior of the last 20 years.

SAXON ON SPECIFIC TOPICS

On winning the fight (1990): “I believe I’ll be proven right by 2015 or 2020.”
page 290

On the design of opponents’ math textbooks (1983): “The idea that children can be taught from books that are unintelligible to adults is absurd. This should be our first check from now on: if we can’t read and understand the book, then the book is unsatisfactory.”
page 250

Greg True, “Michiana Point of View—Writing better textbook brings schools to math teacher’s door,” *South Bend Tribune*, Indiana, 6 March 1983: “The book, along with its documentation of the study conducted in Oklahoma, is elegant in its simplicity. It is designed to teach algebra, nothing else. The book covers 126 topics, one lesson at a time—no chapters, no supplementary materials. Each topic is followed by 30 problems; all but five refer to previous topics...How can a 14-year-old follow a text which on three consecutive pages has a set of factoring problems, a lesson on computer programming, a picture and short biography of a mathematician, and some review problems on the previous three sections? Saxon justifiably calls that kind of presentation ‘spastic’.”
pages 147-148

On how students think: “Aren’t you interested in theory? No, man, I just want to know how to get the answer!”
page 60

On teaching “creativity”: “I do not believe that challenge problems stimulate thinking in other than the most gifted and I do not believe that students can be taught to think by asking them questions to which they do not know the answers. I believe that overemphasis on challenge problems is one of the primary reasons that so many students avoid math. They have been challenged beyond their ability to cope and this makes them angry.” *page 269*

On the need for practice: “There’s nothing wrong with students or teachers. If students get enough practice, they can learn...Don Shula and Vince Lombardi insist that [football] players practice the fundamentals because they must be total masters of those fundamental skills. But the present math books are unsure what the fundamental skills are.”
pages 93-94-95

On criticism of his claims for great gains in math scores and increased enrollment in advanced math classes: “I have been puzzled by the reaction to these increases by some of the leaders of the NCTM. They look you straight in the eye and say that increases in SAT and ACT math scores are meaningless

because these increases do not indicate that students are more proficient in solving real world problems. I counter by saying these increases are not indicators of a decrease in students’ ability to solve problems. How can an increase indicate a decrease?”
page 100

On NCTM’s not proving its “visions” and “premises” (1989): “It is difficult to find words to describe my outrage at a document which proposes that we implement a totally radical and untested change in math pedagogy whose implementation document admits it is a pig in a poke and more pie in the sky. Americans may be naïve, but they would have to be stark raving crazy to let their schools implement this untested and poorly conceived change in direction in math education...I believe that proven results are more important than their premises and visions.”
page 109

On his battles within math education (1982): “It’s a joyful, joyous experience, this one-sided battle. There am I on one side and aligned with me are all the mommas and daddies and employers. On the other are the major book companies and their committees of experts. My side has to win.”
page 140

“Since no one seemed to be mad about the apparent disaster in math education, I set out to see if anything would make them mad [with full-page advertisements that described leaders as arrogant, specious, and absurd]... Seems no one was mad about 82 percent of our 17-year-olds not knowing what the word ‘area’ meant [on a 1983 international test]. But my anger at this state of affairs caused great resentment. I was amazed.”
page 97

On how to “see” student success in mathematics: “I want to see results in student achievement in mathematics evidenced by increased scores on standardized tests [and college board exams]. I want to see dramatic gains in the number of seniors enrolled in academic math courses. I want to see measurable decreases in the number of students who give up on academic math and are in dumb-dumb courses such as basic math, consumer math, or fundamentals of math.”
page 99

On the reformists’ measurement of success (1986): “Ideas in math education seem to be evaluated not on their own merits and on whether or not they work but on the ostensible qualifications of the people who propose them and support them.”
page 100

SAXON AND THE MEDIA

Richard Stengel and Jeanne-Marie North, “New Angle on Algebra—One Teacher Takes on the Establishment,” *Time Magazine*, Dec. 16, 1981. “His features are austere and regular as a mathematical formula, his carriage as straight as the vertical axis in a Cartesian graph. Teacher John Saxon’s eyes are the one variable in the equation: they burn with a visionary gleam. His vision is simple: a future in which the basics of algebra, the building blocks of all higher mathematics, become understandable to all American students.

“Saxon, 58, is an unlikely mathematical messiah. He still resembles what he once was: a professional soldier. A graduate of West Point, he is a World War II veteran, a decorated Korean War combat pilot and a former engineering instructor at the U.S. Air Force Academy.” *page 89*

Chester E. Finn, Jr., “Math Angles and Saxon,” *National Review*, 25 Nov 1988. “If Saxon is right, then a lot of people with fat reputations in the field must be wrong. Education barons don’t like to be wrong. They like even less to be told they are wrong. So long as state and local educators can be dissuaded from buying more of Saxon’s books, he can be shunned. After all, what really matters isn’t whether youngsters learn math. It’s whether the profession gains in stature and public acclaim in consequence of its efforts, however ill-conceived, to address the problems it may fairly be said to have created—all the while retaining control of the processes of diagnosis and solution. Isn’t that what an establishment is all about?” *page 152*

Letter from **William F. Buckley, Jr.**, Dictated in Switzerland, Transcribed in New York, February 10, 1980. (*National Review Magazine* publisher)

“I have meditated your letter. It seems to me that the best we could do for you is to give you the advantage of our magazine (read by about a quarter of a million people) and let you state your case. You write well, lucidly. You make excellent points. You should give us some concrete examples of how your book proceeds as against how the inadequate ones do. Then hurl your defiance at the appropriate bodies...What do you think?”

Yours cordially, **Wm. F. Buckley, Jr.** c.c. Mr. William Rusher *page 65*

[Saxon published that article, “al-ge-bra,” in *National Review* on May 29, 1981.]

William F. Buckley, Jr., “John Saxon: The Rickover of Algebra,” *weekly news column*, July 1982. “John Saxon...will probably figure as prominently in the history of mathematical pedagogy as Hyman Rickover in the history of the development of nuclear submarines...The two gentlemen are temperamental clones. If it ever occurred to Hyman Rickover that he was wrong about anything, one must assume he lay down until he got over it. It is so with John Saxon...who took up teaching of algebra. These [‘new math’] leaders [of the 1960’s] are the individuals who created a set of textbooks blighted by jargon, indifferent to practice, and rather snobbish about ability. Saxon’s is a model of precision. Armageddon is taking place among the mathematics establishment as Saxon’s story is being heard and retold across the country.” *page 91*

American Educator Magazine, American Federation of Teachers, “Math Instructor Challenges Traditional Textbooks,” **Spring 1982**. “Saxon’s contempt for standard mathematics texts has earned him criticism, but he is unrepentant ...[He says] this is not debatable. ‘It works. We doubled and tripled the scores. Just as a football or basketball coach cannot teach the nuances of the game without practice, practice, practice, so you cannot master algebra without practice. When they prepare for a game, they don’t practice esoteric; they practice their fundamentals.’” *page 91*

J’aime Adams, “How the Ol’ Boy Network Hurts Our Children—Why do bureaucrats denounce John Saxon for getting the results we all want?” *Human Events*, 1988. “...a canard is heard occasionally from Saxon opponents which, stripped of its pretty euphemisms and put crudely, is that Saxon is good for poor, dumb kids who need a lot of repetition, but not for smart, rich kids who don’t need to practice...The fact is there is a great deal of data showing that smart rich kids are running away from math and scientific careers right along with the poor...”

“The general feeling among math educators who don’t like Saxon is that his books give only short retention gains in test-taking ability, but that he doesn’t give the students any overall understanding of broad concepts. There is no way to determine a student’s understanding of concepts without tests, and the simpler souls amongst us might be tempted to think that the student who makes a high score on his calculus exam just possibly may be further along the road of conceptual understanding than the kid who flunked.” *page 149*

Jay Mathews, “Psst, kid, wanna buy a...used math book? They’re old-fashioned and a bit tedious but John Saxon’s texts are hot stuff in the education underground,” **Newsweek**, **1 March 1993**. “Saxon wonders why he must prove his case while mainstream textbook companies sell their wares with little hard evidence of their efficacy.” *page 179*

Stanley Hartzler, “The People Speak—Saxon Textbook Should Be Used,” **The Daily Oklahoma**, **16 April 1985**. “...it is terribly embarrassing to ‘expert’ math educators when a retired U.S. Air Force pilot such as Saxon comes up with something better.” *page 168*

The Atlanta Journal/The Atlanta Constitution, quoting from **Executive Editor Magazine**, “**Learning by heart is embraced anew**,” **1 Nov 1992**. “...a heretical yearning for ‘learning by heart’ was creeping across the land...relying on old-fashioned memorization and repetition. These efforts are initiated by teachers and meant to help students apply their learning of the real world. *Proponents* [Saxon supporters] *don’t see this as a retreat into the past, but a post-modern appropriating of traditions for their effectiveness in the present.*” *page 144*

Chester E. Finn, Jr., “What if those math standards are wrong?” **Education Week**, **20 Jan 1993**. “Seldom has so profound a change in conventional wisdom and standard practice [NCTM 1989 national standards document] had such homage paid to it, so little resistance shown to its onrush, so few doubts raised about its underpinnings...Gov. Roy Romer of Colorado and U.S. Secretary of Education Lamar Alexander praise the standards repeatedly... We better hope the NCTM has got it right. If not, American education’s lemming-like rush to follow its lead could find us hurtling off a precipice... What happens to millions of children who receive prepackaged programs and their teachers are ‘told’ the ‘approved’ way to proceed?”

“So long as many teachers are dependent in this way, it’s vital to ask of any new approach being thrust upon the education world whether it has been fully tested with students to insure that it yields the desired results—and is not just being promoted because it appeals to grownups caught up in ideological battles.” *page 112*

“Hero to address Window Rock graduation,” **Navajo Times**, Fort Defiance, Arizona, **24 May 1990**. “Seniors at Window Rock were asked who they wanted for their graduation speaker. ‘Those of us who were looking for someone we admired wanted [Saxon] because he has done so much for us,’ said Arnell Yazzie, president of the senior class. He and others taking calculus had lobbied for Saxon’s selection. ‘Our sponsor suggested the governor of Arizona, but we wanted John Saxon.’” *page 141*

Bill Donovan, “Sum of math teachings equals a pop figure,” **The Arizona Republic**, **27 May 1990**. “...Saxon is hardly a likely teenage hero. Especially when Saxon’s claim to fame is as the author of textbooks for junior high and high school mathematics...But at WR [Window Rock] HS, as at thousands of other schools around the country, Saxon’s name is spoken with reverence by pupils who credit him with changing completely their views about math.”

“In 1984, prior to the Saxon program, students answered 11 of 36 math questions correctly on the ACT, compared to the national average of 17. This year, the Window Rock average was 20, compared to the national 19. Saxon said the NCTMers won’t concede the possibility that higher test scores could indicate that the students have a better understanding of math concepts and that the program works.” *page 142*

USA Today, **1991**. “...60% of the 1990 Window Rock seniors are finishing their freshman year in college. Four years earlier, only 37% went to college and most dropped out after the first semester. The difference, said math teacher Alice Jasmer, is John Saxon.” *page 142*

John Saxon, **Mathematics Teacher Magazine advertisement**, 28 Feb 1983. Testimonial of Charles B. McNeil, St. John Vianney School, Spokane, WA, [Having bought the book for three-fourths of the eighth graders, he said,] “The results were phenomenal...Just before the Thanksgiving holiday, the school had held its annual religious service in the parish church. Every class contributed some item to the altar that symbolized what it was thankful for. There were the usual artifacts of home, family, food, games and flowers, and religious pieces. But this time there was something truly new on the altar—a textbook. It was the eighth grade’s contribution and it was Saxon’s *Algebra 1* book.” *page 105*

SAXON AND THOSE ADVERTISEMENTS

Mathematics Teacher, "Algebra Test Scores Doubled," December 1981.

(This was Saxon's first advertisement.) "Saxon's book is different in three ways. The first difference is that the book can be read by the students. The English language is used to explain the concepts by using straightforward declarative sentences. The example problems are numerous, and each one is fully explained. The second difference is that the concepts are presented in increments so that one increment can be practiced for several lessons before the next increment of the same concept is presented. **The third and most important difference is that the emphasis in every homework problem set is on review. Every topic previously presented is reviewed in every homework problem set. Thus, each problem set is 85% review and only 15% on the new topic.** To get your examination copy and a full report on the [Oklahoma] tests used and a full report on the test results, send a check for \$12.80 to...Wholesale price of the book will be \$10.88."

Mathematics Teacher, "A BAG OF GOODIES FOR THE KIDS," March 1987.

"God is not even-handed in his gifts of creativity as I discovered to my dismay in graduate courses in electrical engineering. I witnessed creativity in other students whose backgrounds were little different from mine and bemoaned my lack of the spark. I have never made an adult contribution to aeronautical engineering, to electrical engineering, to mathematics or to the art of being a test pilot. I believe this lack of adult creativity comes not from a lack of being taught and encouraged to create but from not having enough marbles in my bowl. Because I have been unable to demonstrate adult creativity at the adult level, I think it would be most presumptuous of me to discuss the teaching of creativity or teaching of problem-solving to students, many of whom do have a full bowl of marbles.

"Whenever I am asked to solve a problem, I read the problem carefully and if I am lucky I am able to come up with a method of attack that works. The harder the problem, the longer I have to read it while I grope about in my bag of concept recognitions to find a concept that applies to the problem... If I come to a dead end and have nothing in my bag that will work, **I go to someone whose bag of automated concept recognitions is bigger than mine.** Then he gropes in his bag...**Neither he nor I try to invent new math on the spot.** We just try to find something in our bags that will work or can be slightly modified so it will work.

"Many students who have studied from conventional textbooks have a bag of automated concept recognitions that is almost empty. Thus, the attempt to teach these students to problem solve and to 'create' from the vantage point of an empty bag is worse than fruitless. It teaches no one to solve problems and convinces many of the students that they are somehow 'not mathematical' and are 'not scientific' and they begin to walk and run from math and things mathematical...

"...I realize there is no way to increase the number of marbles in the students' bowls. Instead I teach them to use the marbles that they do have. Students who have studied from my books are running away with prizes in regional contests of problem solving..."

No source, "TERROR AT 3,000 FEET," March 1987...[Saxon first tells his story of being a young airman in World War II when learning to fly and his training instructor was yelling at him to "THINK! THINK! THINK!" as the airplane was descending. Saxon wanted to think, he said, but didn't know WHAT to think. He needed to know specific moves to make. He never forgot what it felt like to have to "discover" how to fly that airplane.] "Flying an airplane requires no more physical dexterity than driving a car or truck...requires a modicum of common sense and little skill...the old timers had convinced themselves that flying was an art that required a God-given ability. The instructors did not believe their job was to be patient and to teach the little they did know. They believed their job was to challenge and finally to judge. Their job...was to determine which aviation cadets did not possess the requisite God-given ability and to wash them out. Teaching these cadets would require much patience and that instructors devise practice procedures that would ingrain the ability to perform the simple tasks of flying..."

"The wash-out rate in the 1930s was as high as 90%. When the need arose to train pilots by the thousands so that America could defend itself against Hitler and Tojo, the word came down to instructors their job was to teach. Commanders were fired and new ones brought in who knew in no uncertain terms to reduce the wash-out rate. Guess what? They found a way. Almost 90% were able to get their wings. (Continued next page.)

“By 1950, when I became a flying instructor, the Air Force policy was to teach rather than to judge and eliminate. I was an instructor for two years and every one of my students got his wings. I guess I tried so hard because I remembered that lovely day in Georgia when I quaked with terror and had other days that were equally traumatic.

“When I began teaching math, I was distressed to find the field crowded with ‘experts’ who really believe they can teach students to ‘think and create.’ I have doubts that few of these people have ever published an original paper in math at the adult level. Yet because they can work some 8th grade problems three different ways, they believe they understand creativity and that they can teach the art of solving original problems. When I ask them for a list of their original adult publications in math, they get mad and feel insulted...

“Creativity can be encouraged...enabled by giving a firm foundation on which students can stand as they reach for higher concepts, and by teaching productive thought patterns and devising practice problems that permit the student to review fundamental concepts from new perspectives...

“Contact us and arrange for a pilot program. Teach your students to fly. Do not foster math anxiety and a flight from things mathematical.”

No source, “THIS TIME THERE IS AN ALTERNATIVE,” 1989 or 1990.

“Mathematics is an arena of proof, but mathematics education seems to be an arena of well-intentioned but totally unproven guesses. The guesses are implemented and will be forced into American schools, not because they work, but because they were...recommended by a committee whose credentials are supposedly impeccable. There is an advantage to this method, for there is no one to blame if the guesses lead to disaster. There seems to be a tacit understanding that we are all in this together and that there will be no pointing fingers if it doesn’t work.

“The ‘new mathers’ [of 1960’s] decided that just being able to work the problem did not suffice if the student did not ‘understand’ first. So the emphasis was shifted totally to understanding and ‘doing’ was ridiculed. It was acceptable for a student not to be able to work a problem if he understood the concept. When the scores began to decline and students

began to bail out of math, it was dismaying to hear experts say that the teachers were to blame, or the students were to blame, or society was to blame. **No one was saying that possibly the experts had made a mistake in recommending the decreed changes,** or that the big book companies were unable to implement those changes effectively in their textbooks.

“What was the rush? Why was the new math not tested before it was implemented? The new math books were used in paperback form before the hardback books came out, but there was no evaluation of this new philosophy. It was forced on our nation’s students with no proof of its effectiveness. **It has taken an entire generation for us to realize that the new math was to blame and the teachers and students are blameless.** Will we now repeat this process? If implemented hastily, the [NCTM] standards may very well result in the ‘new’ new math.

“The [1989 NCTM] standards are just general guidelines. Because there are no hard and fast instructions contained therein, the major book companies will throw together programs in an attempt to sell books that meet these standards.

“Math educators have a fifty-year track record of abject failure in trying to produce effective math programs. Why should we believe or even consider the possibility that they might succeed this time? Why should we subject the entire nation to another grand experiment when successful alternatives already exist? How many more generations of students are considered expendable as we search for effective ways to enable them to master mathematics?”

Some titles used in Saxon’s full-page ads in education journals and magazines and national newspapers (no graphics, color, or photos):

REAL WORLD PROBLEMS ARE THE CAUSE, NOT THE CURE, 1983

MINORITIES DON’T SEEM TO BE IMPORTANT IN TEXAS, 1983

WHY THE DISASTER IN MATHEMATICS EDUCATION WILL CONTINUE, 1987

STARK RAVING CRAZY, 1989 or 1990

SAXON NOTABLE LEGACIES

As a father: [To his four children on a home video] “I know you say, ‘That’s my Daddy. He’s eccentric as hell, but he’s a good guy’...Having your approval means a lot to me. I know I embarrass people sometimes. Approval from those I hold in high esteem is important to me, though.” *page 45*

To **Johnny**, the oldest of his four children, he said he knew Johnny had inherited his “love” for studying. “I hated studying so bad and I watched your agony in undergraduate school and I remember you didn’t want to do the work in a course that was going to get you into medical school. I understood; man, ohhh, I understood... But you hung in there and you’re a real fine doctor. We both had a difficult time getting there, but think of the tens of thousands that didn’t graduate. My number one son graduated from medical school. All I did was graduate from West Point.” *page 46*

To **Selby**, his second child who also earned a medical degree, John said, “My job is to prepare you to do anything you want to in the world...Don’t tell me what *you* want [to do in school]. You don’t know what you want because you’re not old enough now to make those decisions. You don’t know what life holds for you as an adult and you don’t know what you’ll need. You’ll take three years of foreign language, all the math and sciences offered, and the history and literature courses. My job is to prepare you for life. I don’t care if you work at Target when you graduate and leave my house, if that’s what makes you happy. If you choose to do other things, you’ll be able to do so because I did my job as a father.” *page 47*

She said her father’s desire for his children to be able to open any door did not mean that trumped the needs of others. “We weren’t allowed to abdicate our responsibilities in the pursuit of self. It didn’t matter what you had, he would say. It was your attitude that kept you from enjoying life, not your position in society. He was adamant about that.” *page 53*

To **Bruce**, his third child to earn a medical degree, John complimented him on being the “easiest to get along with, with the best nature.” When Bruce was going through a time of doubting himself, John had said [on that home video], “God loves you, just as you are. You don’t have to do anything special; you are totally sufficient for Johnny and Selby and Sarah to have you as a brother.” He said his friends loved his father because he would engage them in conversation about their studies and tell them about his own struggles with mathematics, and how he had arrived at a method that worked and from which students could truly learn the “hard” subject of math. He said his father truly believed it when he said, “I’ve got the answer to math education.” *page 49*

For **Sarah**, his youngest child and a pharmacist, learning early about “Auntiebelle,” was an important lesson. She was her father’s aunt in Georgia and had taught math and foreign language for 53 years. She had made sure that any of her brothers or sisters who wanted to attend college got that opportunity, including John’s father, who became an educator. Sarah said this followed her father’s method of teaching by example. Because of her father’s strong belief in service to others...and the desire to have a solid educational foundation for their own children, she and Bruce and their spouses established a private Christian school in Tulsa. Saxon Math is used there. “What people don’t know is that he wasn’t just about ‘math’.” *page 53*

As an entrepreneur: “Everybody’s financial rewards in his company were a byproduct of their ‘doing the right thing’,” said Johnny. “There was no money for computers or desks or expenses. If anyone needed a secretary, it was up to that person to find one and pay her.” All the sales representatives had been math teachers and had used Saxon Math textbooks and they were real “believers.” In fact, Johnny said, the first 12 sales people with the company were called its disciples because their job was simply to help in John’s mission of changing math education in America. “It wasn’t about making money. The financial results that came to consultants and those working with Saxon Publishers were beyond their imagination because their mission had remained, from the beginning, simply to sell [a true belief in] the ‘Saxon program.’” *page 49*

As a benefactor: “My father was a Renaissance man,” stated Johnny. “His passions included ancient history, great literature, and great poetry.” He remembered when his father, who was fluent in French, talked the French Consulate in Houston into donating 30 copies of Impressionist art to Oscar Rose Community College. He wanted that art to hang in the hallways of buildings because the students would be exposed to art “all around them.” John later donated \$250,000 to the University of Oklahoma to fund a professor’s chair in ancient history. *page 204*

In 1992, a group seeking help for Lithuania schools asked John if he could donate some math books. They had raised \$5,500 to pay for shipment of the materials. Rather than dump 10,000 copies of the second edition of Algebra I books that had come filled with errors, Saxon had his staff make inserts with corrections and gave the books, a retail value of \$250,000, to the group. *page 204*

In 1995, Saxon gave the Texas Association of Mexican American Chamber of Commerce \$2 million in free books to distribute throughout Texas for Hispanic students. *page 207*

His challenges to other publishers to give books to any school or district that would set up a comparison study of his books and theirs was never accepted. On many occasions, however, Saxon did give free books to schools that could not afford to pay for them.

Summary of Saxon Philosophy

- 1) Incremental development of concept with understanding its *parts* (linear progressions) *before* trying to work with total concept
- 2) Continual review every day *with required homework* that has 85% of problems from previous lessons (no skipping of lessons unless student shows 80% mastery of problems from that lesson; no working “every other” problem)
- 3) Frequent cumulative assessments (after every 5 lessons)
- 4) No chapter format: No “hunk swallowing” of topics
- 5) Simple, declarative sentences
- 6) Use of page space for explanations and multiple examples; no expensive color or photos
- 7) An 80% average before moving to next concept
- 8) Practice with new problems of repetition for learning, not for drilling
- 9) No use of calculators in grades K-5; restricted use in middle school prior to Algebra 1.
- 10) “Real world” problems avoided; fantasy problems inspired

GO TO <http://saxonmathwarrior.com>

FOR VIDEOS OF JOHN SAXON,

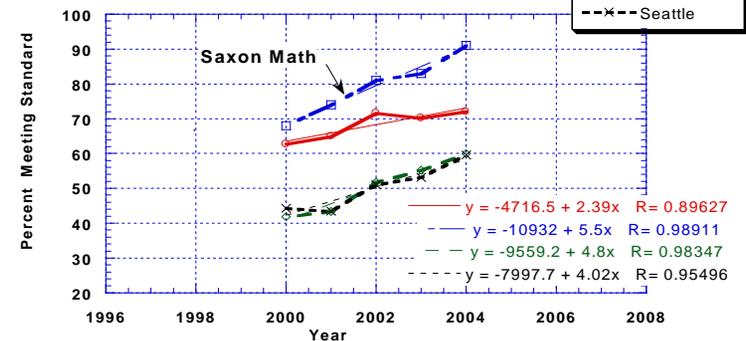
REFORM MATH EXPLAINED,

AND NIKI HAYES DISCUSSING MATH ISSUES

Nakonia (Niki) Hayes retired as a math teacher and principal in 2006 in Seattle, WA. She read more than 2,000 newspaper and magazine articles and viewed more than a dozen videos (home and mass media) that were provided by Saxon’s children. Interviews with the children, former employees, and friends helped complete *John Saxon’s Story*. Mrs. Hayes self-published the book because she was told that “No one wants to read about a math teacher.” She lives in Waco, TX, and owns a tutoring academy.



4th Grade WASL Scores at North Beach Elementary During the Niki Hayes Administration



Conclusion from report: However one thinks about this data, the one certain fact is that the rate of improvement for North Beach with Saxon and a devoted principal was 2.3 times the rate for Bellevue with its huge curriculum development program and its ability to hire consultants such as William Schmidt and all the support of the TERC establishment. Ignoring North Beach, this is still particularly shocking data, since **proficiency in the 4th grade is the critical key to the demanding pre-algebra subjects which appear in the 5th –7th grades.** A rich community such as Bellevue can recover from the bad start suggested by this data, since it is populated with sophisticated parents who can tutor their children or hire tutoring services. The average community does not possess these advantages, and many children will never recover. [Research and report by William Hook, University of Victoria, British Columbia, whook@uvic.ca.]