

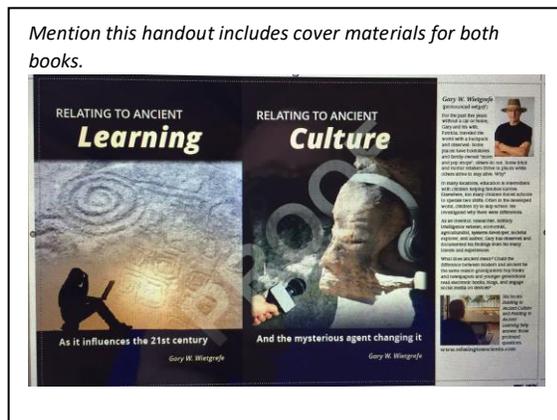
Why are we losing our Memory? Its impact on society.

(2018 book tour: Gary Wietgreffe delivered this presentation in the Ipswich (SD) Library (Feb. 21), at books kickoff Holiday Inn Sioux Falls (Feb. 26), Tucson Festival of Books (Mar. 10-11), and Los Compadres Resort, La Penita de Jaltemba, Mexico (Mar. 20, 2018). Mention my website for schedule: <https://www.RelatingtoAncients.com/>

Introduction:

- For the past six years, my wife and I have no home or apartment. Since retiring early and traveling, only traveling the world, since 2012, we found each society somewhat different and found shocking changes to family culture and learning systems.
- My latest two books developed from our experiences.

Hold up brochure:



This is a presentation on memory.

- Historically, diversity was the norm. Family members supported each other based on combined memories for survival. Memory was required to live. No writing existed for thousands of years. In the last half of the 20th century, certainly in the 21st century the world is developing around electronic artificial memory.

Brief background: (shorten if majority in previous session on another book topic) My book cover bio states:

- “As an inventor, researcher, military intelligence veteran, economist, agriculturalist, systems developer, societal explorer, and author, Gary has observed and documented his findings from his many travels and experiences.”

Why are we losing our memory? This presentation is about its impact on society.

To give you some insight to my memory base, here is a bit more about it:

- I grew up in a farm and ranch family and started my formal education at grade one in a one-room country school between Gettysburg and Hoven, South Dakota. Kindergarten was not offered in our area in the late 1950s. Half-way through grade one we moved back to Ipswich where I attended another one-room school through grade four. Thereafter, we were bussed into Ipswich Public School. Although since 1972 I’ve traveled to over 30 countries, I’m a lifelong South Dakota resident: Born in Aberdeen, started school in rural Gettysburg, graduated from Ipswich, during military training in

electronic intelligence gathering and radar prediction I picked up classes from the University of Maryland and University of Denver, I received degrees from South Dakota State University in Brookings. We raised our children in Pierre, had a cabin in Custer, and since 1992 called Sioux Falls home. Base memories come from South Dakota.

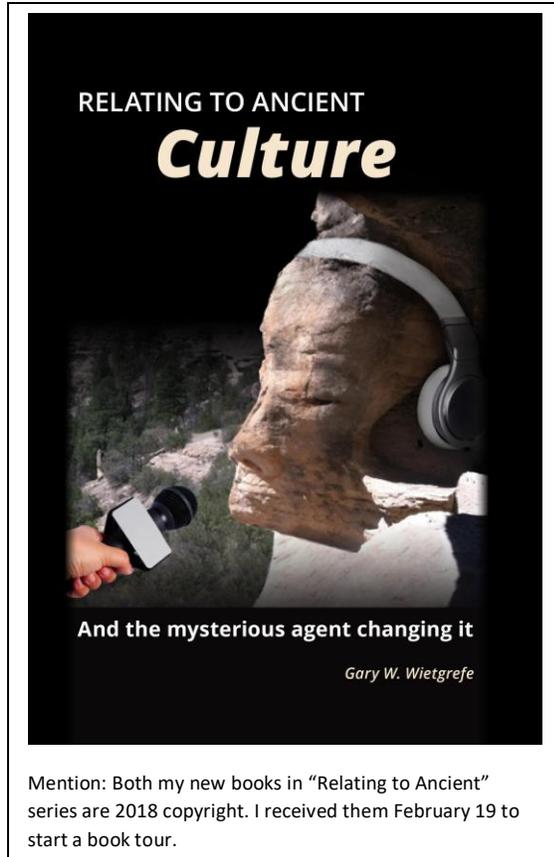
- My first international research was in the mid-1990s helping a student get her Master's degree from the University of Mongolia after the former Soviet Union collapsed. I offered my first two books on the ancient crop millet, advice, and sent her research seed. That was followed by a seminar I presented at Uludag University in Bursa, Turkey in 1997 which resulted in numerous published research papers--many of which are available on ResearchGate.
- The last 14 years of my career, I covered the central and eastern U.S. and Canada (mainly Ontario), developed equipment utility patents, and I received a patent on biomass processing in 2014. Fortunately, we were able to retire early and have traveled the U.S. and mostly internationally observing various culture and learning systems since 2012.
- **Ability to remember actually differs by culture.** Some countries, like the U.S., Canada, Australia, New Zealand, Western Europe, and the Canary Islands off the west African coast, I would define as fully developed. Artificial electronic memory is widely utilized. Bosnia, Mexico, Belize, and the Caribbean are certainly developing fast, but Fiji, Guatemala, and Honduras for example have undeveloped, developing, and developed areas in the same country where ancient memory systems operate simultaneously, in the same community, sometimes in the same family, as those relying on artificial memory systems.
- We found each society somewhat different and found shocking changes to family culture and learning systems.
- Historically, diversity was the norm. Learning was a family responsibility. In the last half of the 20th century and certainly in the 21st century, the world is developing around artificial electronic memory.

Ask questions:

- What is memory and how do people use it? *(Get a few audience responses.)*
 - Throughout history, memory was only defined as what an individual could remember. However, some animals have very good memories and plant seeds remember everything of their parents and reproduce generation after generation based on their memory system.
 - Likewise, humans not only retain memory to reproduce and have characteristics of their parents, our minds through electrical and chemical neuron stimulation from sight, sounds, touch, and even eating expand memories such that future

speech, writing, relationships, socialization, diet, and movements are based on past memory.

- Remember, memory is past! Let's get into the books.



Show book. (Read highlighted areas from book except very short quotes.)

This is the first in my "Relating to Ancient" series of books. I wrote both books simultaneously, but "Culture" came out of the printer ten days before "Learning."

- My book "Culture and the mysterious agent changing it" is based on memory. The first words in the introduction of my book are:

- **Culture – Introduction pg. xi:** "Culture is survival. Memory is culture. Society is losing all three. Survival is in jeopardy when memory, books, and clouds disappear."

(Obviously, I am referring to electronic digital clouds of data storage.)

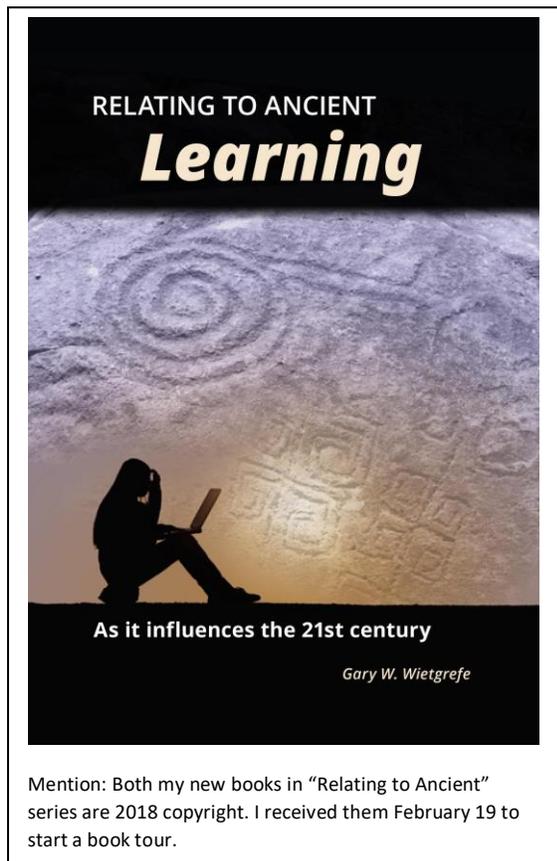
The next paragraph:

- **Culture – Introduction pg. xi:** "It is never the job of others to remember your memories. *Relating to Ancient Culture* can only be accomplished through memories. Past thoughts create cultural understanding."

- What is the first artificial memory system? (Wait for a couple audience responses.)

Writing. Petroglyphs were a memory aide, whereas hieroglyphs and eventually alphabet systems were to replace memory.)

- Ancients remembered. They could not read or write so communications, finding and cooking food, making clothes, and building shelter were based on individual memory.



Show "Learning" book.

- Ancient example: I'll give you an example is used in my book "*Learning as it influences the 21st century.*" This is a story that starts the chapter on Memory.
 - Ancients needed to remember. While staying La Penita de Jaltemba, Mexico in the winter of 2013-14 my wife purchased a tablecloth from one of over a hundred vendors at the local Thursday tianguis—weekly market. Six days per week vendors travel from village-to-surrounding village selling everything locals need and in the winter what tourists want. Two years later, our friends from Florida came to visit us when we were staying back in that town. About 20,000 people live in the three villages that support the Thursday tianguis in La Penita and around 5,000 Northerners, mostly Canadians, winter from one-to-six months in those traditional farming and fishing villages.
 - My wife took her friend to walk through the tianguis one Thursday and as they were walking through the crowded street, a vendor stepped out of his booth and said, "Buenos dias. I remember you. You bought one of my table cloths two years ago." Amazed, the two ladies looked over the table clothes, and our friend bought one.
 - When we told the story to a local taxi driver who spoke good English, he explained that 90% of the local vendors were illiterate. They had to remember product, prices, competition, and customers in each of the six villages in order to compete and sell their products. That is why none of them give receipts. They can't write. Generation, after generation, they have sold products and teach their children the art of making a living with their product. They move daily, so children haven't attended school.
- That is how ancient memory developed. What do you think is electronic artificial memory? *(Let audience give examples of electronic artificial memory.)*

- When was electronic artificial memory invented? *(Ask dates from audience.)*
- Who invented it? (French bookseller, Edouard-Leon Scott, 1853-54 patented 1857); recording not known until researchers studying old patents discovered the recorded sound 2007. A couple decades later, a young American inventor began working on sound recordings.
 - Thomas Edison at age 22 received his 1st patent June 1, 1869--“Vote recorder” so congress could be more efficient recording votes. It tabulated “Yes” or “No” votes. It was a crude yes/no memory system. Congress never used it fearing it would interrupt final negotiations while voting.
 - Thomas Edison at age 31 developed what became the 1st electronic voice recorder June 22, 1878 in St. Louis, MO. Actually from 1878 to 2007, when Edouard-Leon Scott’s patent was found to have recorded sound, Edison’s was considered the first novel voice recorder. Scott’s sound recorder, or artificial memory system, was hand-cranked, where Thomas Edison’s phonograph moved from hand-cranked to an electrical operation recording sounds.
 - **Culture** pg. 217 “Experiments with electricity date back 5000 years before Benjamin Franklin (1706-1790) discovered positive and negative electrical charges, its equilibrium without power, and electrical storage batteries that helped develop the first, but short-life light bulbs in England around 1835. An electrical light bulb was not practical until Thomas Edison (1847-1931) made one long-lasting and manufactured 1200-hour light bulbs in 1880.

“Without (Franklin’s) constant supply of electricity, (Edison’s) artificial memory system, (Franklin’s) electrical storage batteries, German physicist Heinrich Hertz’s (1857-1894) transmission of electromagnetic radio waves in 1887, and (Edison’s) telephone carbon microphone transmitter, today’s cellular smartphones would not exist.

“Sure, there are new models of cellular phones and electronic gadgets appearing monthly, but it is a huge stretch to call them novel compared to their fundamental base of innovative technology.”

Promote next talk: For those interested, please come back for my presentation “21st Century Technophobia and Busiphobia”

Audience Questions:

What are some of today's results of electronic artificial memory? *(The audience may be confused with "results" and "electronic artificial memory", but seek answers before making it a rhetorical question.)*

- Who drove here? *(Note hand's raised.)*
- How many used a map to get here? *(Note hands raised.)*
 - That means all *(or nearly all)* of you used memory to get here.
- How many used a Garmin or electronic mapping system to get you here?
 - Those are electronic artificial memory systems.
- How many think self-driving cars will catch on? *(Note hands raised.)*
- Will you ever ride in a self-driving car? *(Note hands raised.)*

OK let's discuss the traditional route:

- Who pays more attention to where you've been & how you got to a place, the driver or passenger? *(Expect response from audience "Driver".)*

Let's go back to the self-driving car example. Assuming they catch on, people will order one, it will show up at your door and take you to your designated location to a restaurant, airport, or to another state.

- Question: Could you drive home again without a map or electronic mapping system?
(Wait for realization to set in before giving more details.)
- Likely not because you don't remember how you got to your destination. The self-driving car took you there. Secondly, our youth today have been raised on electronic artificial memory and rely on memory storage mapping gadgets to give them usually voice instructions on where to turn and when.
- Many of our children can't read paper maps.
 - Vacation story: One year when our girls were 14 and 16 and had their driver's licenses. South Dakota trainee drivers licenses are given at age 14. Anyway, we took a vacation from South Dakota to California. Our girls, riding in the back seat, were generally bored sleeping or reading, and occasionally asked if they could drive. On a long stretch of empty road in Wyoming, I asked our oldest, Michelle,

if she wanted to drive. She jumped at the opportunity. I said, “OK, Charmion, you get in the passenger side and be map reader.”

- Patricia and I sat in the back seat and observed while the girls adjusted their seats, mirrors, and took off. About 15 minutes later after paging through the atlas and glancing at state maps, Charmion asked, “What state are we in?”

- Everything is a NEW EXPERIENCE if you can't remember or never used a system.

- *(Assume these will be rhetorical questions.)* How did our ancestors get around?
 - **Learning – pg. 293-294:** “Several books describe what we consider amazing feats of memory. Cold climate explorer and author Barry Lopez, in his 1986 book *Arctic Dreams*, researched old British journals of Arctic explorations. Lopez described how an early Arctic British expedition journal explained a meeting with a group of Eskimos. They exchanged questions about surrounding bays and islands.
“An Eskimo took a stick and drew in the sand a map with such accuracy, the overliterate British Navel Officer found it too accurate. As if reviewing a film, Arctic Eskimos like Australian Aboriginals could mentally pinpoint and describe landscapes and elevations where animal paths intersected and birds roost on migrations paths, or where ice pressure ridges developed so seals could annually surface for air in water pools surrounded by untold miles of sea ice several feet thick.
“Eskimos did not read or write. Both men and women relied on memory; especially noteworthy was their spatial memory of what we call maps. Lopez went on to explain how the maps drawn with a stick in the sand were just like the ones the British expeditions had drawn while exploring the many inlets of the islands, including every little steam and elongated point as if the Eskimos had known longitude and latitude.
“...It took the British 2000 years—until 1714 A.D. to establish a Board of Longitude to scientifically draw naval maps.... Had the educated Brits, Spanish, French, and Portuguese studied, observed, or simply asked and worked with hunters, nomads and coastal fisherman, they could have developed longitude/latitude maps a couple millennium earlier. Chinese likely did.”

Memory is fleeting. I want to get into more details about how fast things can change. What we had to use our mind to do now may be replaced by a machine in 15 years...just like electronic

GPS map readers have replaced paper maps and memory and self-driving cars may replace drivers.

Yes, drivers in 15 years may jump into a self-driving car. Get stopped for some reason, and not have a clue where they are at.

A child starting school this year will graduate in a world that did not exist when they started school. Like memory, schools will be forgotten.

(Please catch my talk on [“Why the School System Won’t last”](#).)

I’ll give you another example that happened in many of our lifetimes.

Calculators: How many use a calculator to balance your checkbook, or when buying big box of food comparing to a smaller box?

Checks and checkbooks are quickly becoming antiquated and most people assume food in a larger container more economical per unit than smaller packages. That is often not the case.

- What is considered the first calculator?
Chinese invented the abacas about 900 AD and I saw them used in about every store while I lived in Japan in the early 1970s.

- When were electronic calculators invented?
 - 1963: Bell Punch Co. England, electronic desk calculator “Anita” weighed 33 lbs.
 - 1958: Texas Instruments invented “integrated circuit” which lead to calculations
 - 1964 Sony Corporation (Japan) 1st transistor calculator in 1964 called the “SOBAX” which stood for “solid state abacus”.
 - Mid-1960s: add, subtract, multiply, divide, using semi-conductor calculators. Sharp, Canon, Texas Instruments.
 - In 1968, Hewlett-Packard released its desk-calculator at the retail price of \$4,900.
 - 1970: Sharp using Rockwell technology released AC powered, hand-held calculator in New York City in 1970 for the announced price of \$495.00.
 - Same year 1970 several companies (Sharp, Canon, Texas Instruments) introduced battery powered calculators between \$299 to \$345.
 - By 1976 LCD (Liquid Crystal Displays) introduced and combined with LED (Light Emitting Diode, became Light Emitting Device) calculators reduced price to \$20 to \$10 by 1978.

- Interestingly, calculators developed the last 15 years of my grandfather’s life. He was born June 30, 1891, and year my grandfather passed, in 1976, calculators were used distributed and cheap enough to use in many college courses.

- What's the results? Decreased ability to calculate in brain. Brain's memory and calculation system has been replaced with smartphones and calculators.
- **Learning – pg. 73:** "I further contend calculator use in lower grades causes under-development of students' thought process. Student brains, taught arithmetic with calculators, will not mature to a level where calculating in their heads becomes possible. All born between 1891 and 1929 with no formal education beyond age fourteen, I never saw my grandfathers, father, or father-in-law use a calculator. However, they could all tabulate bushels-per-acre, to bushels-per-field, to bushels-per-year times price- per-bushel providing gross and net income faster than I could type it into a calculator.

"Teachers may agree that mental arithmetic/calculating is lost, but they recoil with comments like "Calculators and computers do it faster and more accurately."

"When someone is drowning, will there be time to find a computer or smartphone to calculate how much rope to throw? Those gasping for survival hope the rescuer quickly finds the necessary means to help. Like an untrained brain, a calculator, smartphone, or computer tablet will remain idle while someone drowns. Functionally, gadgets cannot replace a calculating brain.

"A computer system will not innovate; it only records and reports. Consequently, should students graduate with the ability to calculate and reason, or simply have the ability to operate a computer?

"More importantly, computers and calculators make the brain lazy and lessen comprehension. ...It appears young adults raised on digital snippets do not possess the ability, energy, or determination to innovate. Something or someone else is expected to do it for them."

Memory lose will impact society. I go into more detail on my talk "21st Century Technophobia and Busiphobia", but, here is another example:

Phone numbers:

- How many used to remember their parents, children, friends phone #s, addresses, and zip codes?
- What do you do now? (Expect audience to say they use their cell phone.)

- Why?

(Take out my cell phone. Act like I'm punching three buttons.) It is easier to punch a couple buttons. Easier; memory not required.

- **We are trained to forget!** For the last month in Mexico, I could not dial my wife's phone number. For years, I punch in every number just as practice so I can always call my wife from any phone if I need to. I mentioned my phone dialing problem to a teenager, and he asked, "Do you have your wife's phone number in your phone 'Contacts'?" I said, "Sure." He went on to explain, any phone number in my cell phone "Contacts" had to be dialed from tapping the number in "Contacts"—the phone is programmed that way. "I am being forced to forget her phone number," I explained to the teenager. He said, "Just say the number to yourself when you touch her contact phone number."
- **What's the world impact?**

(If have presentation time, give 1997 example of traveling to Turkey. Abbreviate in necessary.)

In 1997, my wife did not have a cell phone. Although it would have been a convenience, we had a home phone she could use. For five years I had been using a mobile cellular phone. It was a big, hand-held traditional telephone handset with a heavy black bag—mostly battery, sitting on the floorboard of my vehicle. In rural areas I traveled then, the two Dakotas, Minnesota, and Wisconsin had many cell phone towers, but they were concentrated in cities. Rural areas had spotty coverage, if any.

Cell phones were expensive—25 cents or more per minute while roaming and most of my travels were on roaming towers.

Anyway, in the spring of 1997 I spent a month in Turkey and everybody had cell phones. I realized, Turkey, like many countries that did not have the money to develop nationwide telephone infrastructure to every home and office. A decade earlier, most of the population, peasants, didn't need cellular phones. It was originally for the upper class. Television shows and movies in the 1980s showed under-cover detectives pulling a telephone receiver from a cubby-hole between the front seats to call in a secret.

Turkey mostly skipped the costly telephone infrastructure building phase of putting in posts, stringing wire on them to homes and offices or digging trenches and laying telephone lines underground. Instead, Turkey, like other developing countries, simply put in cellular towers and sold phones and programmable minutes—100 or so, for a few

lira. In 1997, nearly everyone on Turkish streets had small cellular phones when it was still a costly gadget on American streets.

Communication is much more economical and efficient than transportation. Wireless communication is much more economical than wires running to every building in the country.

As I state in my book Culture—pg. 255: “Throughout history energy is minimized. Efficiency always wins.”

Repeat: “Efficiency always wins.”

It is true based on my formal education in economics, or informal training working for the railroad, in steel construction, agronomics of crop production, or in playing sports.

“Efficiency always wins.”

That is why undeveloped countries have the ability to by-pass developed countries in schooling. Using memory with simplified infrastructure is efficient. Why build and maintain school structures in every community staffed with average teachers when, 21st century technology could allow every student in the country access to a pool of the world’s best teachers for a few cents per day.

If you haven’t already, you may want to sit in on my presentation, “Why the School Systems Won’t Last.”

Yes, the 21st century is changing. It is changing fast. We are losing our memory. We are losing our ability from lack of memory or even to mentally think through projects and mentally calculate. Some countries will jump ahead of others when people are given freedom to use and operate available technology and invent new uses.

- Electronic artificial memory has replaced
 - Sense of location & surroundings
 - Ability to remember phone numbers & addresses, and how to get there
 - Ability to calculate

 - Learning: pg. 296: “Thirty years ago, everybody I knew remembered many of their colleagues’, customers’, and parents’ phone numbers, addresses, and zip codes. Today, workers and children rely on their cell phone to automatically dial

a number and look for an address. Minds no longer have the desire to remember. Young and old are being conditioned to forget.

“Unfortunately, using inventions of past generations in a structured school system, today’s students are losing their ability to remember.

“Memories create thoughts. Thoughts develop into ideas. Ideas become innovations.

“Inability to remember does not allow cognition to process facts into concepts to accept the unknown, innovate, or develop novelties.

I finish the chapter on Memory by asking:

- **Learning – pg. 296:** “Petroglyphs and hieroglyphs are permanent, books semi-permanent, memory generational, and electronic digital clouds are fleeting. What would you pick if your life depended on one?”

Part 2: I explained the first part of my presentation—“Why we losing our memory”. What about the second part of the title: “Its impact on society”. Memory affects the way we socialize, invent, and the way a culture develops.

Innovation: If memory is required to explain and expand on an old experience to create a **NEW EXPERIENCE**, and if electronic artificial memory (mapping device, cell phone, calculator) substitute, how can new innovations occur?

- **Culture pg. 275-276:** “In the 1890s, many things still done as in the past centuries. Since extensive records do not exist for those thousands of years, for the questions below consider changes between the beginning of the twentieth century (the year 1900) and today:
 1. Are there more people in the world? Yes.
 2. Are people living longer? Yes.
 3. Are people eating more and do they have better shelter? Yes.
 4. Will people subsist without electricity, running water, indoor bathrooms, vehicles, computers, phones, gadgets, public healthcare, education, and other wants? No.
 5. Is there a higher or lower percent of people in the workforce? Lower percent.
 6. Are people working as many hours as in the past? No.

7. Are boys and girls entering the workforce as early as they have in the past? No.
8. Are people spending more time in school rather than working? Yes.
9. Are people working as hard, as diligently, and are they as conscientious about their work and employer needs as in the past? No.
10. Does delayed workforce entry delay retirement? No.

“After reviewing the half-score of questions above, it appears today’s needs and wants are not sustainable with today’s workers for tomorrow’s lifestyle. Everybody wants to know, what is the ending score.”

I’ll refer back to my book cover of “**Culture—inside flap front cover**”: “Since the beginning of time, humans have always had to satisfy their basic needs: food, clothing, shelter, and training children to insure they are self-sustaining. If basic cultural needs remain the same, why does the current culture seem to be changing more than in the past?”

Learning pg. 324: “In and out of class, young adults spend inordinate amounts of time on automated gadgets mentally feeding on snippets with memory spasmodic. It is synthetic thinking.

“World transition to electronic artificial memory may be the biggest setback in human history. A brain operating a smartphone may some- day remind people to pee.

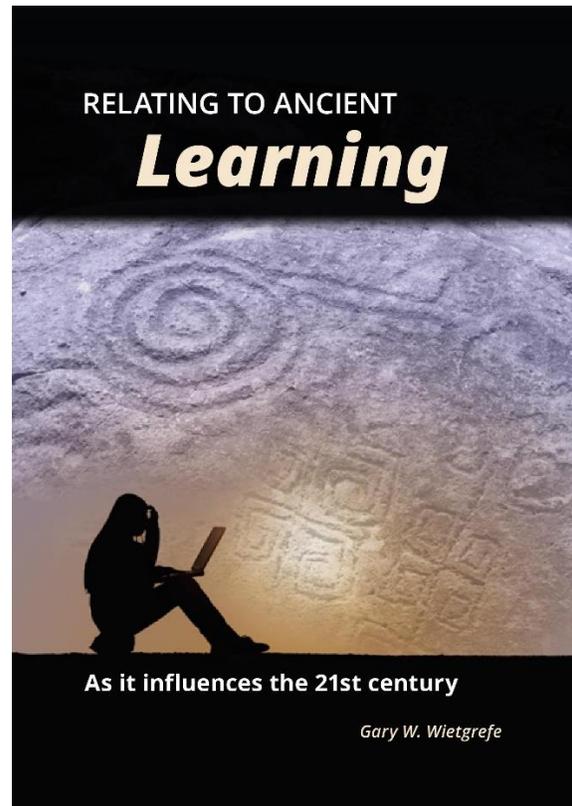
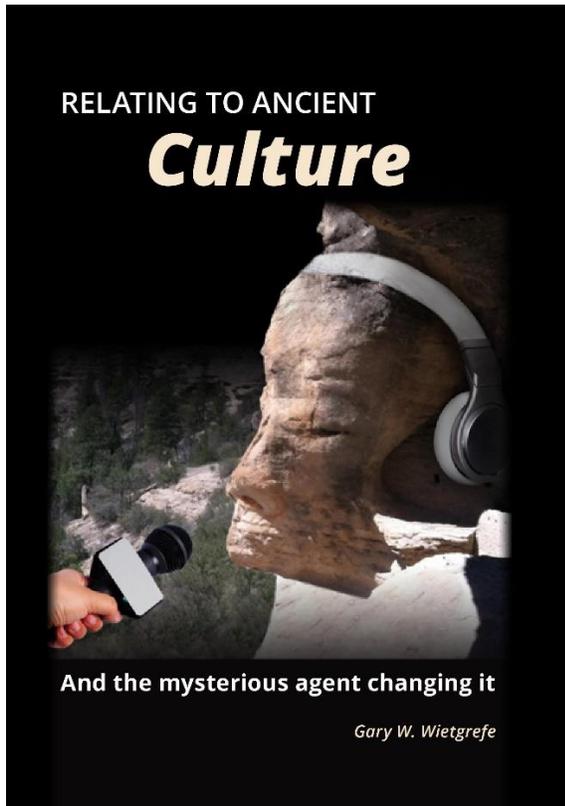
“Laying hidden are novel ideas never exposed or used. Integrated thoughts produce innovation. Given more leisure time, demand for satisfaction will increase. A body’s self-satisfaction historically meant survival, but now in developed societies it feeds off artificial gadgets.

What does the future hold?

Today, nearly everyone daily uses millions of bytes of electronic stored information yet the provide **NO CALORIES** needed for daily sustenance.

The great news is there is a new, tech-savvy generation developing that will closely align with ancient ways, ancient family and social systems. How can that be?

(Hold up both books.)



Read my ***“Relating to Ancient”*** series of books:

- ***“Culture and the mysterious agent changing it,”*** and
- ***“Learning as it influences the 21st century”***.

Where can you get my books?

- **My website:** www.RelatingtoAncients.com has a list of worldwide suppliers of hardcover & e-books. My New York hardcover distributor will supply all channels; as well, my e-book distributor has downloadable versions for mobile readers.