

CAN AN OLD DOG LEARN NEW TRICKS?

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Thesis: Senior citizens comprise a significant percentage of the population and have the time to pursue other interests which after retirement may include both formal and informal ventures. Travel is certainly an attractive option, is broadening, and opens up new vistas. The world around us is so fascinating and offers an endless variety of scenery, culture and physical diversity. Why not learn more about it for the pure appreciation of it? Even though physical disability or financial insecurity may interfere with active travel, there are many newer avenues of approach which simply didn't exist a few years ago, but which offer great opportunities to almost anyone. On the other hand, age-related memory loss is one of the realities of life making retention of knowledge more difficult. But does everything have to have a utilitarian dimension? Can't we just enjoy doing something for the fun of it? Isn't life more than just an endless pursuit of money, power and prestige? Does everything we do have to have an economic or a utilitarian reason – including making a good grade in school? I maintain Senior citizens can have a ball learning that the field of Geography is a fascinating field to explore, and that the active pursuit of knowledge is good for the memory, and for the maintenance of mental function.

In his book Memory Cure ¹ Thomas Crook outlines a life style plan to help retard age-related memory loss. (1) Exercise your mind to enhance memory skills and learn to expand your knowledge bank from which to draw memories. This fits well into my

premise that a deliberate continued interest keeps the synapses working and the Beta ganglion cells functioning in their capacity as reservoirs of knowledge. The known physiological principle of disuse atrophy also applies to the Neuro-sensory Sphere. (2)

Eat a healthy diet. Many older Americans, particularly those who live alone, tend to neglect basic nutritional rules and fall short of the minimum daily requirements of minerals and vitamins. What we eat affects what and how we think. (3) Change your attitude toward stress – some is good, and avoidance of all stress makes the mind and body less able to cope. (4) Exercise regularly to maintain bodily strength and vigor. (5) maintain a positive attitude. Depression can easily become a habit and lifestyle. (6)

The role of dietary supplements is controversial and although Cook recommends the use of phosphatidylserine, a drug in the family of d-Lysergine that is used for Parkinsonism, most Neurophysiologists would not agree. Adequate sleep and regular sleep habits are also helpful, even for those with Narcolepsy who might even have a tendency to take a nap after lunch, even in the Classroom of a 1:30 p.m. Class.

Only suggestion number one actually fits within the parameters of this paper – the value of Geography as an interesting, challenging and rewarding field of study for the over 65 Population. Dr. Paul Tournier in his book *“How to Grow Old”*², made the suggestion that a retirement hobby was best begun in mid-to-late forties, and could thus be more enjoyable when the time came to quit work. Many people in their late forties have reached the empty nest plateau, their children having graduated from college and/or married, and are able to pursue life-long goals of travel for enjoyment. With the

availability of tour packages at a reasonable cost, many are taking advantage of their opportunities and seeing areas of the world they had only heard about before. This becomes very enjoyable, almost addicting, so that by retirement time – often in the late fifties – many are accustomed to traveling and visiting distant and remote locations. The Mobile Home-RV field has attracted many participants and it is only natural to be curious about not only the scenery, but the natural phenomena encountered, new and old cultures, history, climate patterns, etc. Questions arise such as how did the Great Sand Dunes form at this altitude and a thousand miles away from the ocean? Why did the various strata of rock form in the Grand Canyon? Why is Mt. Everest still gaining height? Why do the strange animals live in Australia and nowhere else? Where did the Anasazi go when they left Mesa Verde? Trying to respond to questions posed by grandchildren also may well instigate a search, since no one wants to appear ignorant in their eyes.

Other hobbies can also interdigitate with the serious study of Geography, notably Stamp collecting and Amateur Radio. Stamp collectors are always in the market for a new issue of exotic stamps from Bhutan, Tibet, Vanuatu, Swaziland, or from new countries such as Bosnia, Slovenia, Belarus, and want to know what event or structure formed the basis for it. To find out where the country is located, one must resort to a map and to read a little about the country involved – which increases knowledge and increases familiarity with the world at large. A Hungarian stamp with Magyar Post on it raises questions – why Magyar and not Hungary? Why Suomi instead of Finland? Why do Taiwanese stamps have both English and Chinese on them? Why should Anguilla feature Queen Elizabeth

and Prince Philip on a stamp series? Stamps celebrate many events and people, fauna and flora, rulers and tribal people so natural curiosity should lead one to discover why.

Amateur Radio places a huge emphasis on Geography. Working DX³, or contacting foreign countries over the air can become an obsession, and many Hams work diligently in trying to contact all possible Countries in the world. Although there are only about 160 recognized political entities officially recognized by the United Nations, there are approximately 325 Ham Radio Countries, many of them rock islands in the Antarctic area such as Peter I, Macquarie, Heard or Kerguelen. Or off the coast of Brazil like Peter and Paul Rocks, Trindade, or Fernando de Noronha. Coral atolls like Palmyra, Clipperton or Kwajalein are sometimes *rara avis*, and many are only occupied for a short period of time by a Dxpedition Team of operators there for a few days to provide contacts with Hams all over the world, confirmed by a QSL card. News of these operations becomes worldwide and many thousands of operators are attempting to make contact at the same time which produces a horrendous pile-up and much QRM. It is essential to know the exact location of each DX country in order to know the beam heading in which to point an antenna for efficient reception and transmission, as well as the time of day, time of the year and sunspot activity, all of which play into the equation. Solar flares can totally disrupt HF, but increased solar flux and increased sunspot activity cause higher levels of ionization in the atmosphere, and radio waves are reflected back to earth rather than radiating into outer space, making long-distance communication much better. Another geophysical phenomenon is tropospheric ducting when higher frequency waves are able to go much farther than expected. Meteor scatter is another phenomena in RF travel and

some amateurs use EME - Earth-Moon-Earth bounce⁴ – whereby signals are literally bounced off the moon and back to earth from one station to another. All of this requires knowledge of Geophysical phenomena. In addition to contacting the more exotic locales for the challenge of it, conversational contacts (QSO's) with overseas or stateside operators can be informative. My friend Senor Evilio Real, YV5IE, for instance, lives in Caracas, Venezuela. He was formerly in the Photography business but is now an Importer of Toilet Paper! We talk about Venezuela, the United States that he has visited many times, about Radio equipment, families and many other topics. He calls me “My gud friend Beel” and we have a great time. You can’t get that out of a book or by watching a Video. My friend Fred is a Brit who lives in Zimbabwe and we met on Ten Meters one day. Two years later, I visited him in Harare and went to dinner at his home out on Whyte Ladies Lane. He loaned me his older Yaesu Transceiver and we operated from Western Matabeleland near the Umniati River using only 45 watts of power into a dipole antenna strung between trees 25 feet above ground. It was fun talking with Hams in Botswana, South Africa, Namibia, Uganda, Poland, Russia and other places. In fact, one afternoon I created a pile-up into Central Japan and the Japanese operators were falling all over themselves trying to get my attention with their station. I sent Fred the National Geographic for Christmas for several years. One day, I met Victor, a Russian Junior High School teacher and we talked about thirty minutes. His English was excellent – and mailed his six-year son Serge an American Birthday card. My point is that Ham Radio gives great incentive to study Geography. Tom Christian, VR6TC, is active from Pitcairn Island where his several times great ancestor Fletcher Christian settled after the Mutiny

on the Bounty. King Hussein of Jordan, JY1, is a Ham and Senator Barry Goldwater was very active on the bands both from Washington and from Phoenix.

Geography was basically a primary school subject in the 1940's. In fact my next exposure on a formal level was 56 years later as a retired person returning to College, but I felt better acquainted with the subject than the majority of my late teen-early twenty year old classmates, mostly due to years of experience serving overseas with the United States Air Force. As a Flight Surgeon, part of my job involved flying to Morocco, Libya, Denmark, Berlin, Belgium, Spain, France, Athens, Istanbul and other sites in the performance of medical duties. Short term Medical Mission service in overseas countries gave great exposure to Human, Medical and Physiographic Geography. In the interest of learning, we read extensively about a country prior to visiting, listened to language tapes, took copious notes in a notebook while there⁵, read more about it after we returned and then often presented lectures on the people, their culture, and the physiographic features encountered. You can read about an Escarpment in a textbook but actually standing on the rim of one and looking over a wide unbroken vista across the African savanna is something else. Many other older people also have had travel exposure so are in an ideal position to continue their interest. This can be entertaining in more ways than one. For example, I once had a patient, a Professor of Education, who had traveled extensively, and in later years developed a retinal detachment. Post-operatively she had to wear pinhole glasses and remain in bed for several days, unable to read. I asked how she was spending her time in that position and her reply was "I am reliving the details of some of my trips overseas." Before the years of TV, Video, the

Internet and CD-ROM, The National Geographic Magazine was the mainstay of travel information and in Geography, with enclosed maps and pictures. I remember seeing the first photographs which actually showed the earth's curvature, taken from an altitude of approximately 80 thousand feet from the Bathysphere. After World War II, the Society went into the book publishing business producing many Monographs and series that explored a wide variety of subjects. In addition they along with Rand-McNally and others produced some excellent Atlases which went beyond mere reproductions of the earth surface. Thematic maps, graphics, celestial charts, sea floor depictions and other data were added as new technology developed. The National Geographic Society⁶ remains in the forefront even today, by using new methods of presentation such as TV programs, Videocassettes, and an Internet Web Homesite. The Society sponsors trips to many remote locations led by Scientists who are knowledgeable in the field and which are otherwise inaccessible.

There are formal and informal means of learning, including a return to the real classroom in a formal University setting. If you have the good fortune to live in a College town, it is possible to enroll and take classes in Geography as a part-time student and thus get back into the pattern of regimented learning, from skilled Classroom Professors, associating with students, both regular and non-traditional, having the advantages of newer techniques and access to more comprehensive data bases and teaching tools. It does take an adjustment, but you are free from the pressure of trying to make an A in order to qualify for Graduate School, from learning to discipline your life away from direct parental direction, from trying to figure out a life time career, and establishing a

balanced social life. The State of Kentucky has an agenda called the Donovan Scholar program whereby over age 65 individuals may enroll tuition-free in a State-supported Institution of higher learning, including Community Colleges. For individuals on a fixed income, this is a very nice feature. After having supported Public Universities by paying taxes for many years while in the work force, many feel it is a deserved perk. But enrollment doesn't have to be On-Campus since many Regional Universities offer interactive television courses in Community Colleges or totally Off-Campus settings. Public Television is a vehicle for offering courses which supplement Correspondence Courses also and World Geography is featured each Fall Semester from Murray State University via KET - Kentucky Education Television - with weekly Videos which are produced by the Textbook Publisher, John Wiley and Sons, Inc, and filmed under the direction of Dr. H.J. de Blij and Dr. Peter O. Muller, authors of "Geography: Realms, Regions and Concepts, 8th Edition. The Videos offer supplementary material and do not replace material supplied by the Correspondence section.

A newer wrinkle currently being developed is that of a Virtual University via the Internet. The Western Governors University⁷ for example, offers a variety of courses through a consortium of Universities in Western States including Northern Arizona, University of Colorado, University of Hawaii, University of Alaska, Idaho State, Montana State, Oklahoma State, Utah State, Washington State, University of Wyoming among others. Full College credit is awarded for successful completion of the course work. I have not been able to locate a source for a post-graduate degree in Geography but WGU does offer two undergraduate courses including Human Geographics a 3 hour

course with the University of Colorado at Boulder as Education Provider through its Division of Continuing Education. In 1995 only one-third of the countries higher education institutions offered students long-distance learning, but the U. S. Department of Education estimates the number will double by 2000. The Cyberclassroom is not the same as learning in a traditional classroom, however. A class lecture is very much a performance (!) but there is no substitute for face-to-face interaction with a class, says Concord University's Dr. Cosgrave⁸. Usually in a Classroom the lecturer can tell if he is getting across to the student, but not in cyberspace. At present, one of the biggest limitations is the capacity of the network to transmit information rapidly. With analog telephone lines, the material can't be bandwidth intensive and it takes forever to download graphics, but newer technology such as video streaming or compressing audio and video will help.

Smithsonian Study Tours⁹ sponsored by the famed Institute in Washington, DC, offer some 360 different tours from 250 destinations with travel programs which are a combination of travel, discovery, and exploration. They have a variety of destinations including City interludes, Countryside tours of such places as Provence, Wessex, Normandy, and Switzerland with daily excursions and meetings with the locals. This allows the participants to absorb more of the ambiance, insights, and natural history of the area visited. Seminars held in the Classroom with local faculty are sponsored in such locales as Jerusalem and Oxford, England. For train buffs there are several trips such as Famous Trains of Europe enabling one to ride on the London-Paris Chunnel Express, the Paris to Lyon high speed TGV, the Orient Express through the Simplon Pass and Alpine

country, the Trans-Siberia Express, and other classic passages. If you take a tour to the Republic of South Africa, you can include the famous Blue Train from Johannesburg to Capetown, or in Australia the train across the Nullarbor Plain from Adelaide, South Australia to Perth, Western Australia or up to Alice Springs with nothing but outback for three days.

Another outstanding organization is the Elderhostel program¹⁰ for over 55-year-olds. Established in 1975 in New England, approximately 270,000 people participated in various offerings last year. It's mission statement pretty well outlines the purpose: Elderhostel is non-profit organization committed to being the preeminent provider of high quality, affordable, educational opportunities for older adults. We believe learning is a lifelong process; sharing new ideas, challenges and experiences is rewarding in every season of life. There are both domestic and foreign programs offered at a reasonable price, and include meals and lodging often in a College or University setting or extension thereof, with local University professors teaching courses of note, usually in the context of the history, natural history, local culture or other genre specific to that locale. Cultural Immersion tours involve homestays . How about a week in the Swiss Alps spent with a host family in the Emmenthal valley experiencing rolling hills, gorges, rushing mountain streams and clean air? The North American tours often encompass a group of 50 persons with a five or six day program lasting from Sunday through Saturday. The courses involve 3 to 4 hours of instruction, plenty of free time to investigate on your own. The cost is approximately \$390 per week, all-inclusive, aside from transportation from your home. What better way to learn about the Grand Canyon than to take an Elderhostel

program at the South Rim and being taught by a Professor from Northern Arizona University? Step out of the Classroom into Nature's lab.

Elderhostel overseas tours usually last from two to four weeks and include air transportation. For example a two-and-half week tour to Great Britain runs \$2600 from New York and a three-week session in Australia is listed for \$5650. These learning experiences are not for credit, no homework required and no examinations to take. Accommodations are modest but clean and friends who have taken them have been very enthusiastic. A local Doctor friend and his wife went to Bermuda for Oceanography and met Prince Philip of England while there and found him to be very friendly and polite. (He was there on vacation and not with Elderhostel) Serendipity. Elderhostel also sponsors some 225 local community-based programs, or ILR's – Institutes for Learning in Retirement. They are also non-credit and local people control the agenda and present the material. In Kentucky there are two such programs, one at Western Kentucky University in Bowling Green and the other at Bellarmine College in Louisville. Elderhostel also offers Intensive Study programs in a single discipline for credit with extensive reading and research required in order to write a Research Paper. More fun offerings are also available in the form of specialty programs such as camping, skiing, trekking, walking, language, shipboard and train trips. Courses especially for RV campers are some of the more recent wrinkles.

Computers and the Internet have really revolutionized learning and have opened up many new vistas. School children, even at the kindergarten level are computer-literate to an

amazing degree and generally put their elders to shame. From the early days of Computing for the masses as spearheaded by the Apple Company, their popularity has grown to an amazing degree and some 35 million Americans now own at least one PC in their own home. From low-speed, low memory instruments like my old Apple II plus had 64K RAM and 5 ¼ inch floppy discs with a nine point dot and matrix printer to the current 333 MHz Celeron Chip, a 6.4 Gigahertz hard drive, 64K RAM, a 32X CD ROM disc player and Epson stylus Ink Jet printer with 1440 X 720 resolution - has been a quantum jump. And that is only the beginning. CD Cassettes, based on the Compact Disc music systems can carry an amazing amount of information in a small size format so that it is possible to write far more sophisticated programs including multi-media presentations using still pictures, sound tracks, color video and so called virtual reality. Just one program offered by Softkey International, Inc. of Cambridge, MA is entitled Key Action Traveler and proclaims its virtues to wit: "Never take another boring adventure again! This is an incredible multimedia database of action adventures and special interest travel in places located around the world, described in detail and lavished with brilliant color photos and stunning motion picture video and sound...". On just one CD it offers over 1000 adventures featuring Scuba Diving, River Rafting, Hot air ballooning, Mountain climbing, Wildlife Safaris, Jungle Treks, Cycling tours and more. While a multi-media presentation of a white water rafting trip down the Jackson River at the base of the Grand Tetons doesn't give the smell of the air, the spray in your face, the up and down and side to side sudden movements of the raft, it does make a couch potato feel like he or she is in another milieu. Television offers many fine programs however, and the

Adventure Channel, Travel Channel, PBS and others do provide something those aforementioned Couch Potatoes can enjoy and appreciate.

The fastest growing method of accessing information has been the development of the Internet using a personal computer and telephone line. In 1969, the U.S. Department of Defense set up an experimental four-computer network so that Research Scientists could communicate with one another. In the 1980's, the National Science Foundation started its own net with access free to all interested parties but used mostly by Scientists and University Professors. This was expanded to include commercial sites in 1991 and the World Wide Web System was launched in 1992. Internet web sites have proliferated and now you can find almost anything if you look hard enough. In 1998, there were 100 million people around the world using the Internet.

GIS technology (Geographic Information Systems) is available, a computer system capable of assembling, storing, manipulating, and displaying geographically referenced information. It works by relating information from different sources, Data capture, Data integration, Data structuring and Data modeling, and can perform complex analyses. No longer is a map just a flat piece of paper telling us where we are and where we want to go. Aerial photography was the initial step which has led up to present day GIS. In 1858 Gaspard-Felix Tournachon¹¹, a Frenchman, took aerial photographs from a balloon over a village near Paris, and there are a few existent photos taken from a balloon during the Civil War. Both sides during World War I used aerial photography to map battlefields, and military use has greatly spurred the development of modern day technology, applied

in the civilian sector. In the 1920's, the Fairchild Company developed aerial cameras and aircraft for pioneer surveys in the United States, and in World War II cameras and techniques were further refined. The next landmark involved the use of rocket-mounted cameras in 1946 using captured German V2 rockets over White Sands, NM in 1946. The first computer-generated maps were made in 1950, and Explorer 6, the first weather satellite, sent televised images back to earth. In the 1970's, GPS satellites were launched by the United States Military which could localize any spot on earth within 30 feet, technology later used in hand-held instruments which pick up signals from four or five navigation satellites to vector using micro-computer technology. In 1972, NASA launched the first Landsat satellite with a multispectral scanner able to measure four wavelengths of reflected energy simultaneously. It was then possible to study an area in detail using visible light wave lengths for natural color, near infra-red for vegetation (in red), thermal infra-red for heat and radar for relief in black and white. Later models of Landsat 4 and 5 measured seven wave lengths. Using computer technology it was then possible to do a composite using overlaid images. The commonality of these systems was collection and transmission of data in digital form so they could be computer processed and printed out for mapping and other purposes, The USGS¹², NOAA and other government agencies provide much of this data and it is possible over the Internet to order maps of specific areas for designated parameters of study. Much previously classified Military data is now available for general use by the public.

Almost everyone is interested in the weather, and weather satellites have provided a great deal of information, such as for the nightly Weather News radar picture, for following the

progress of Hurricanes and in early warning for conditions conducive to tornado warnings and watches. NOAA also has several Websites, with regional up to date satellite pictures, and Purdue University along with others has valuable education programs and data available.

In summary and in answer to the stated question Can an Old Dog Learn New Tricks the answer is a decided yes. People are living longer both in terms of life expectancy and in quality years of living after early retirement. Mental awareness is definitely stimulated by the presentation of external stimuli which require not only recognition but also integration and assimilation. As never before, people now have such a wide range of opportunities to study and appreciate the wonderful world of nature and works of creation. Its never too late to learn. Keep that rocking chair in the corner, Grandma's off to Hawaii to study Mauna Loa and take Hula lessons.

¹ Crook, Thomas H. *The Memory Cure: The Safe, Scientifically Proven Breakthrough That Can Slow, Halt, or Even Reverse Age-Related Memory Loss*. New York: Pocket Books; 1998

² Tournier, Paul. *Learn To Grow Old*. Philadelphia: Westminster Press; 1981.

³ Locher, Bob, W90KNI, The ARRL Operating Manual 1985. Newington, Ct.; 1985: 5 - 1 - 25

⁴ Owen, Michael R. W9IP. The ARRL Operating Manual 1985, Newington, Ct.; 12-14, 15

⁵ Rowlett, William M. Medical Mission Trip Journals. 1967 - 98

⁶ Internet: www.nationalgeographic.com. National Geographic Society, Washington, DC 1998

⁷ Internet: <http://www.wgu.edu/wgu/about/index.html>. Western Governors University, 1998

⁸ Clark, Brian L. Getting Your Degree via Your PC. Money.Com, 1998/Winter. 1999: 66 - 69.

⁹ Internet: www.si.edu/tsa/sst

¹⁰ Internet: <http://www.elderhostel.org/EHORG>

¹¹ Wilford, John Noble. Revolutions in Mapping. National Geographic Magazine. 1998, 2:6 – 39

¹² Internet: <http://into.er.usgs.gov/research/gis/title.html>.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "William M. Rowlett, M.D.", written in dark ink.

William M. Rowlett, M.D.