

MY GLOBAL JOURNAL

As an Evolving

Mathematician and Humanitarian

By

Johnny L. Houston, PhD

jlhouston602@gmail.com

Four (4) of my Major Missions in Life have been:

I. Promoting and Supporting

Excellence in the Mathematical Sciences (STEM)

II. Adhering to following Guideposts for developing a life with a foundation of Scholarship and preparing for Leadership

III. Promoting and Supporting

A Community (Worldview) of Diversity and Inclusivity.

IV. Promoting and Supporting

Doing Outreach/Service (Contributing to needs of Others)

ABSTRACT

During the first twenty-five (25) years of my Life my Educational and Social-Economic Conditions transitioned from a world of Poverty (abject) to a world of Preference (comfort) to a world of Privilege (a multiplicity of viable options and choices). This transitioning has been the Foundation of my Global Journey. For the first ten year of my life, I lived in Sandersville, GA - USA, a small southern town with a population of about 2,500 (60% B/AA, with more than 50% of B/AA living in poverty). The heads of my family struggled to speak English correctly and my family struggled daily to survive. Fifteen years later, I began living in Strasbourg, France (population over 250,000) and studying mathematics at the post-master graduate degree level in a world-class university (Universite' de Strasbourg) under two professors who were believed to be members of le Société' de Bourbaki (Nicolas) in the topology group. Scholars from at least eighty (80) different countries were studying at the university, representing different cultures, different religions, different races, different ethnicities, different socio-economic backgrounds, and with different views of the world community.

After a year in Strasbourg and at the university, I had a different view of my scholarly interest in mathematics and a different view of the world community. I departed with a deeper appreciation and a much greater insight of the beauty and importance of the discipline area of mathematics that I had never dreamed. I also left with a greater conviction of the principles that Dr. Martin Luther King, Jr had taught us (when I listened to him vicariously and when I was present in his audiences): "Mankind must learn to live in a world community with respect and tolerance for one another or constantly keep in engaging in war with each other and constantly destroying us all." Thus, I departed with a much deeper appreciation and conviction that respecting, supporting, and promoting Diversity and Inclusivity was the kind of worldview of community (large or small) that was necessary for humanity to survive, live and thrive.

Finally, I will never forget how I got to Strasbourg. I got there by being the recipient of a gift of ones who had resources and decided to share. The Merrill-Lynch Financial Firm endowed a number of Study-Travel Fellowships for Atlanta U (now Clark Atlanta U) to select two persons each year who had obtained a master's degree and showed promise to benefit from an Expanded Exposure beyond the USA. This one-year Study – Travel Fellowship greatly impacted my life.

On November 19, 1966, at the age of twenty-five (25), my Global Journey had been launched. It has continued since that date.

In January 1967, Time Magazine selected as it's **"Person of the Year," The Generation Twenty-Five and Under.**" It was a great pleasure to believe that my generation was establishing a new place in history and that I personally had begun a new and Noble Journey in my Life. I had decided to become a Mathematician par Excellence, to become a "Citizen of the World, and be a Friend to Mankind."

"I have faith that with mathematics, most problems can be solved; some will take longer than others; however, with an open and penetrating mind, and with persistence and determination, solutions will evolve."- Johnny L Houston

I. The Road of Becoming a Mathematician

Early in Life I discovered that I had the gift of an analytical mind and that I enjoyed solving problems. This occurred long before I had heard of the words Mathematics, Mathematical Sciences or STEM. After entering college and getting the Challenge-Inspirations from Professor Henry C. McBay: “If you wish to be an excellent scientist (chemistry or any area of STEM), you must first become a very good mathematician,” mathematics started to become a dream. The more mathematics courses I took from Professor C. B. Dansby, the more fascinating the “World of Mathematics” became. However, not quite to the level of Eric Weisstein in his journey to develop “Wolfram MathWorld.”

I appreciatively, began to see mathematics as a fascinating Art, a precise Language, a logical and methodical Science, a powerful Quantitative Tool, and as a Self- Perpetuating Creative Discipline that continues to grow without known boundaries. I see It is a discipline that can provide one with significant insight that can help one to understand more and more about “The Design of the World and the Design of the Universe.” For me, mathematics is, unquestionable, the Foundation of STEM

There Is No Precisely Agreed Upon Single Definition for Mathematics. However, there are many intriguing quotes about mathematics. We now list fifteen (15).

1. Mathematics – the unshaken Foundation of Sciences, and the plentiful Fountain of advantage to human affairs . Isaac Barrow
2. Mathematics is the supreme judge; from its decisions there is no appeal.–Tobias Dantzig
3. Mathematics is the queen of science. — Carl Friedrich Gauss
4. Mathematics may be defined as the subject in which we never know what we are talking about, nor whether what we are saying is true. — Bertrand Russell
5. Mathematics is like love; a simple idea, but it can get complicated.
6. Mathematics is not a deductive science – that is a cliché. When you try to prove a theorem, you do not just list the hypotheses, and then start to reason. What you do is trial and error, experimentation, guesswork. — Paul Halmos
7. Mathematics is a great motivator for all humans. its career starts with zero and never ends (infinity).
8. Mathematics is the cheapest science. unlike physics or chemistry, it does not require any expensive equipment. All one needs for mathematics is a pencil and paper and a creative mind.
9. Mathematics is a more powerful instrument of knowledge than any other that has been bequeathed to us by human agency. — Descartes
10. Mathematics is a body of knowledge, but it contains no truths. — Morris Kline
11. Mathematics is the science which draws necessary conclusions. — Benjamin Pierce
12. Mathematics, even in its present and most abstract state, is not detached from life. It is just the ideal handling of the problems of life.– Cassius Jackson Keyser
13. Mathematics compares the most diverse phenomena and discovers the secret analogies that unite them. — Joseph Fourier
14. .People do not decide to become extraordinary. They just accomplish extraordinary things. Edm.. Hillary
15. Basically, I am not interested in doing research and I never have been... I am interested in understanding, which is quite a different thing. And often to understand something you have to work it out yourself because no one else has done it.- David Blackwell

Please critique my CV to see some of the many roads I traveled to become a mathematician.

II. Houston's Twenty-five (25) Guide Posts for one Aspiring to develop a Scholarly Life or may become a Leader- Part 1

A. Strive to be Happy. My grandmother instilled in me, that the happiest people in the world appear to be persons who do not necessarily have the best of everything, but persons who learn to make the best of everything that they have; be optimistic and hopeful.

B. Endurance with a vision of optimism usually helps one to receive the best in Life; Tough Times do not last forever but tough people tend to stay in the race longer and benefit more than others; give living your best effort and it tends to bring one the best rewards.

C. We are all born to learn and to discover, those who usually get the best out of Life are those who dream noble dreams and pursue them with enthusiasm.

D. A Life well-lived usually have the foundation of having obtained a quality education, a variety of impactful, experiences, many informative exposures, and a vision of living with an attitude of optimism and enthusiasm.

E. Wise decisions are almost always based on current and accurate information, do your research before you decide; unfounded assumptions and mere guessing can be costly.

F. Wisdom is the application of knowledge at the Appropriate Time to bring about desired positive result; one cannot apply what one does not know; it is very profitable to be a Life-Long Learner; for most of us, the largest room in life the room for improvement.

G. As a "Boy Scout," I learned to be prepared; it is the responsibility of "Eagle Scouts" and selected leaders to get the job done; scholars/leaders need to stay focused on assigned tasks.

H. Accept and understand that persistence and determination must be omnipresent if you are to do your best, achieve your best and be your best.

I. Develop a commitment of doing quality work in all your endeavors; never forget that each endeavor is a "Self-Portrait" as how others view you as a scholar/leader.

J. Never forget the value of a disciplined life based on sound principles; Life is not simple; it is often difficult and complex; with discipline, it is usually always rewarding.

K. Excellent productivity usually comes when one "Plans" his/her "Work" and work his/her "Plan;" beginning each day with "Expectations" and "Ending" each day with "Profit" is a noble way to live; it does not occur accidentally.

L. In planning any endeavor to present to others in public, always remember and adhere to the five "P's": Prior Preparation, Prevents Poor Performance.

II. Houston's Twenty-five (25) Guide Posts for one Aspiring to develop a Scholarly Life or may become a Leader- Part 2

M. Always pay attention to details, these are the “Building Blocks” of the “Whole;” not understanding a single detail can cause one to not understand the entire issue.

N. Do not be your own destructive energy; always take time to take care of self.

O. Never forget that there are usually many ways to solve a problem; always explore different options beginning with the “What If Approach?”

P. When working with others, share graciously; but never forget the “Need to Know Principle;” there is no need to share knowledge that is not needed to achieve the goal.

Q. When working with others, do not be a parasite; contribute as much or more than you receive.

R. When working with others, never forget the power of cooperation and being considerate of the opinions of others; it often takes many different “Parts” to formulate “The Whole.”

S. When working with others, develop a habit of always disagreeing in an agreeable manner if you feel strongly that you need to disagree; this fosters respect and permits Communication to remain open.

T. Never forget that “Courtesy” is a very power “Weapon” for effective communication, effective negotiation and for gaining support and “Trust.”

U. Never forget that how you treat and relate to others have a powerful impact as to how they will relate and treat you.

V. Do not ever permit “Difference” to allow you to pre-judge another human being.

W. Honor and respect every person's dignity and humanity unless they give you “Concrete” reasons to do otherwise.

X. Practice “Outreach” to relate and include others that are “Different” from you.

Y. Remember that no person is a “Secluded Island,” we all get our fundamental identity as a “Human Being,” which means that we have more in common than we could ever be different; after all each of us is part of the “Universal Community of Mankind.”

II. The Road of Becoming a Humanitarian (a friend to “man”)

False assumptions, based on undocumented principles and opinions, are often used by many people to initiate actions toward persons “**Who are Different**” from them. Frequently, this leads to actions of “**Mankind’s most inhumane acts against Mankind.**” Moreover, such assumptions usually prevent little or no communication between different people/ different groups. Instead, they usually lead to creating mental walls between persons/groups, along with distrust and fear. They promote a “We against Them Attitude” without knowing why. It often prevents treating one another with mutual respect. Here are some actions to help alter this. Consider: eradicate or change such assumptions or attitudes? Consider the following:

Learning and Altering One’s Attitudes and Actions on Important Words of Awareness

A. Diversity is recognizing, appreciating valuing, and positively utilizing the unique talents and contributions of all individuals. **Diversity means** different or varied. **Diversity is** the mosaic of people who bring a variety of backgrounds, styles, perspectives, values, and beliefs as assets to the groups and organizations with they interact.

B. Self-Awareness – with self-awareness, one understands his/her values, motives, and personal beliefs. At his level one is conscious of personal strengths and weaknesses and is sensitive to the effects he/she has on others. Knowing who we are and how we impact other people helps us to choose appropriate behavior.

C. Tolerance is accepting others as being different from oneself. **Respect is** when we grant full regard to a person without pre-judgement or compromise and interact according.

D. Communication is done by both behavior and words. All behavior is motivated. It is not accidental. Everyone should try to comprehend how others feel and why they behave the way they do. Persons who are **empathetic and aware** can comprehend the behavior and emotion of others. **Empathy allows** us to perceive, what might have been the roads that other may have traveled and allows one to become more sensitive to differences among individuals.

E. Exposure to different groups, environments, and cultures **helps one to broaden one’s** insight and abilities to effectively understand persons different from us by helping us to recognize that our “personal and historical reality” may not be the “only reality” that we need to understand.

F. A humanitarian actively engages in promoting human welfare and social reforms and has no prejudice with human identification on grounds of race, gender, sexual orientation, religious, or national divisions; a humanitarian's goal is to save lives, relieve suffering, and maintain human

G. A Cosmopolitan is one who has an interest in different ideas, peoples, and cultural diversities; having a worldwide view of community rather than a limited or provincial view, and impartially extends this view to include all races and all creeds.

H. Inclusivity is the approach or quality of seeking to include or relate to as many different people as feasible and treat them all fairly and with human dignity.

IV. Traveling the Road of Outreach/Service (Contributing)

A. Outreach/Service begins with connection. All outreach/service activities begin with forging trust and building relationships with the people. In these relationships, everyone is encouraged to benefit from their involvement by the way they participate, grow, and support.

B. The purpose of outreach/service is to contribute, support, and guide others who are seeking to achieve goals that you can help them constructively realize by your involvement.

C. For many who engage in Outreach/Service, they are inspired by a dream (s); personally, I encountered fascinating personalities in my Youth (some vicariously); the wonderful ‘Worlds They Drew’ were far beyond the ‘World I Knew,’ and I began to Dream! Then I began to visualize! Why not? If I believe it, If I can conceive it, then I can achieve!”

D. For many who engage in Outreach/Service, they realize early that success requires prior Education, Exposure, Experience, and Wisdom, as well as Endurance and Commitment.

E. For one who engages in Outreach/Service, that person often recognizes early that “Wisdom is the application of Knowledge at the appropriate time to bring about the desired constructive and positive results;” since one cannot apply what one does not know, to grow in wisdom, one must be a life-long learner

F. For one who engages in Outreach/Service, one of the greatest expectations by others is for that person to be a Catalyst for constructive change, not just an inactive visitor; .

G. For one who engages in Outreach/Service, challenges often occur and require action; thus, when a challenge occurs, one is faced with the questions: If I do not act, then who will? If do not act now, then when do I act?

H. For many who engage in Outreach/Service, they view it as “Building Bridges for future Generations;” they recognize that each day “they drank from ‘Wells’ they did not dig, and they are nourished by ‘Harvests’ they did not produced; should.”

I. For many who engage in Outreach/Service, they realize that no person is an island, but we are all part of the “Community of Mankind” that depends upon one another to survive and thrive; thus, it behooves each of us to live well, be useful, to contribute gratefully so that other might benefit from our existence.

J. For many who engage in Outreach/Service, they learn that an attitude of optimism greatly impact their altitude of productivity, often surprising themselves and those who are benefitting.

K. For many who engage in Outreach/Service, they had earlier dreamed of a life of joy; after successfully being engaged in Outreach/Service, they concluded, “This is Joy.”