THINK POSSIBILITIES!!!
The man’s mouth sagged in disappointment. “But only yesterday, you told me the sun was closer.”

“Yes,” said the boy, “but that was before we saw all these people from Ch’ang An. Have you ever seen anyone who came from the sun?” ¹

His thinking went only as far as he could see!

Close to the end of 1999, near the beginning of this millennium, you may have been like me, as it seemed every time I read a newspaper, magazine or turned on TV “best lists,” such as the ‘The top 100 best movies from 1900 through 1999,” were listed. One list I came across in late November 1999 was in USA Today, which was mainly compiled by Herb London, the publisher of American Outlook magazine, that featured what it characterized as a few poorly chosen words from the past, and it intimated that sometimes thinking can have “blind spots.” The list reminded me of the boy in the story whose thinking and decisions were formed mainly by what he thought he knew or by what he could see.

I’d like to share a few of these quotes.

In 1859, workers said to railroad conductor Edwin Drake before he drilled the first successful U.S. oil well, “You mean to drill in the ground to try and find oil? You’re crazy!”

Charles Duell, director of the U.S. Patent Office in 1899, said, “Everything that can be invented has been invented.”

Lord Kelvin of the British Royal Society and one of the 19th Century’s top experts on thermodynamics was quoted as saying in the 1890s that “heavier-than-air flying machines are impossible!”

A quote attributed to the Nobel-winning physicist Robert Milliken in 1923 is that “there is no likelihood man can ever tap the power of the atom.”

H. M. Warner, one of the Warner motion picture brothers, said in 1927, “Who wants to hear actors talk?”

Thomas Watson of IBM said in 1943, “I think there is a world market for maybe five computers.”
In 1946, Darryl Zanuck of 20th Century Fox said, “Television won’t last because people will soon get tired of staring at a plywood box every night.”

In 1954, Jim Denny was quoted as saying to Elvis Presley, “You ain’t going nowhere, son. You ought to go back to driving a truck!”

And in 1981, the following quote, “640K ought to be enough (computer power) for anybody,” was attributed to Bill Gates.

Obviously, Bill Gates has been one to think possibilities in the computer and software industry and he has inspired others to do so as well, particularly through his and his wife’s Minority Scholarship Program.

Therefore, my core message this afternoon is WE MUST encourage ourselves, our families, our students and colleagues to think beyond the known. My belief is we need to think in terms of possibilities instead of just emphasizing and merely regurgitating what is already known. We do need experiences and knowledge of the known past, but we should not stop there. A quote I often use in my classes when I teach university students who will, in turn, teach others is by that prolific writer, Anna-nonymous: “Students are not things to be molded, but people to be unfolded.”

When I consider people who have thought and acted in terms of possibilities, Thomas Edison comes to mind first. I have two favorite stories I have heard about Tom over the years.

My first story about Thomas Edison is when someone asked him if he ever got discouraged when, time after time, he’d have a failed invention. He said he didn’t get discouraged because he now knows at least 50,000 things that don’t work…but that led to inventions that did! Because of his perseverance with trials and errors, one invention that affects us today is we are sitting in a well-lighted room. I am not giving this speech using a gas lamp, kerosene lanterns or candles!

A second story about Thomas Edison highlights his genius and practicality. In order to visit his summer home in Fort Myers, visitors must push open an extraordinarily heavy gate. A dinner party guest once complained, “Tom, with all the things you’ve figured out and invented, why can’t you get a front gate that’s easier to open?” Tom chuckled, “Each time the gate is opened, a gallon of water is pumped on the roof!” “Why the roof?” asked the lady. “Because that’s how we get our hot water here in Florida!” He was thinking in possibilities and
solving problems at the same time! I wonder, did he invent the first solar panel, too?

Then there is “The Real McCoy”! When I tell this story, listeners often think it has to do with the Hatfields and McCoys feuding. But, it doesn’t. This is about Elijah McCoy as related by Wendy Towle in a children’s book titled *The Real McCoy: The Life of an African-American Inventor.*

Elijah McCoy was born in Colchester, Ontario, Canada in 1844 to George and Emillia McCoy, former slaves who had escaped from Kentucky via the Underground Railroad to Canada. George served in the Canadian Army and was granted 160 acres of farmland for his loyal service. Being a landowner gave him the right to vote and to send his children to a public school. Elijah attended a school for Black children where he learned to read and write.

Elijah from very young years wanted to know how mechanical devices worked. He liked to take machines and other things apart and then see if he could put them back together. His parents saw he had a special talent and saved money so Elijah could study mechanical engineering at a school in Edinburgh, Scotland at age 16. The Civil War started while he was in college, and when it ended, he could be a free man in the United States, and he eventually settled in Ypsilanti, Michigan. However, he had difficulty finding a job as an engineer. Prospective employers had not met an educated Black man, yet alone a Black engineer. He finally was hired as a fireman/oilman for the Michigan Central Railroad.

An oilman was important to a train in those days, as certain parts of the train needed to be oiled every few miles to keep the train running smoothly on the tracks. When the train would stop frequently, the oilman would walk along the stopped train and oil moving parts such as axles and bearings. When this was done, his task was to go inside to tend the firebox until the next train stop.

Elijah saw possibilities for making his job more efficient. There already were some mechanical oiling devices invented, but he felt he could make one better. It took him two years to perfect a design of a lubricating cup that would drip oil as needed, which would eliminate stopping the train. He got a patent in 1872, but many had no interest in a Black man’s invention. The railroad he worked for gave him a chance and installed his oil cup as he supervised. It worked so much better than others and soon other railroads wanted automatic oil cups for their trains. Before long, when an oil cup was needed, buyers would ask for “The Real McCoy.”
Elijah went on to invent many other things, including the portable ironing board, a graphite lubricator, a lawn sprinkler and longer wearing rubber heels for shoes. He definitely was an engineer who considered possibilities.

Someone else who saw possibilities was Mary MacLeod Bethune, as researched by Patricia and Fred McKissack. She heard that living conditions of Blacks were terrible in Daytona and that they had no school. She intuitionally knew she was needed. She began getting small loans, and, in 1904, she started the Daytona Normal and Industrial Institute for Girls, who used charcoal and recycled paper from the city dump to learn. Soon she had so many students that she needed more property. She bought that city dump for $250. A passerby saw her looking down at the dump one evening and asked why she was staring at all that junk and trash. She replied, “Don’t you see? It’s my school!” The man believed her. Many other people believed in what Mary saw and they donated large sums of money including Henry J. Kaiser, John D. Rockefeller and Thomas Gamble of Proctor and Gamble.

In the meantime, there was a Men’s Black College in Jacksonville. They had means, but not a large enrollment and a high turnover of teachers. This college was named Cookman Institute. In 1925, they combined and founded a four-year coeducational college today known as Bethune-Cookman College in Daytona. Mary McLeod Bethune became the first president. Remember, this all began because she saw possibilities in a dump!

Another individual who thought and believed in possibilities was Jaime Escalente, the teacher in inner-city Los Angeles whose story and the story of his students is related in the movie Stand and Deliver. He believed in these students and his expectations were high. He vowed they would be able to pass the Advanced Placement Calculus Exam. When he started, many of these students had little belief in themselves and many did not imagine or think in terms of possibilities other than what they knew for their limited futures. Escalente began with simple things, such as helping them to learn and understand fractions by doing such things as cutting an apple in half. The students volunteered for this and even attended summer school. When they passed the Advanced Placement Calculus Exam, the results were challenged because the belief that these students could do this, knowing who they were, was almost non-existent outside of Escalente and his students. Escalente had to meet with members of the testing board to assure he did not teach the exam nor had his students cheated! They were allowed to retake a different version of the exam, with all students scoring a
second time in a similar range. They were not only thinking in possibilities, but they showed that possibilities can become reality.

I’d like to share one more story about a man whose name you might not recognize, but I feel you might have his “invention” in your home, office, purse, etc. The man’s name is Art Fry. I see no heads nodding as to who this person might be. \[Hold up Post-it Notes.\] Raise your hand if you’ve heard of these! Keep your hand up if you’ve used one of these. The Post-it Note actually celebrated its 20\textsuperscript{th} anniversary this month (April).

Art Fry is a member of a church choir in Maplewood, Minnesota. Fry would use slips of paper to mark his place in the hymnal, but they constantly fell out. He knew he needed a better way to keep his place or he’d forever be out of sync. Then Fry heard about a unique adhesive that Spencer Silver had developed in a 3M Lab. It was sticky, but could be repositioned. Fry knew he had an answer to his bookmark dilemma. A short time later, Fry wrote a note on his bookmark and stuck it on a report going to one of his colleagues. Only then did he realize he had a new way to communicate and organize information. After initial market tests in 1977 drew little interest, the Maplewood-based company decided to give away thousands of the little Post-it Pads, as they were referred to at that time. Consumers overwhelmingly liked the idea. 3M began selling Post-it Notes in 1980. Two years later, the company introduced Post-it Printed Notes. In 1990, came the Post-it Pop-up Dispenser to keep the notes close at hand. The little notes are now available in 56 shapes, 27 sizes and 50 colors. There also are Post-it Flags, Post-it Easel Pads, Post-it Self-stick Bulletin Boards and more. In 1996, the concept went digital with Post-it Software Notes. And 3M isn’t done yet. This year the company will introduce 4-inch-square lined Post-it Notes. Obviously Art Fry, Spencer Silver and their co-workers at 3M thought in terms of possibilities and most likely will continue such thinking in the future.

To think possibilities has no cultural, color, gender or socioeconomic lines. In our classrooms, sometimes parameters need to be set, such as turning off beepers or cellphones; but whatever limits are set, thinking should not be one of them. We are at a time in our world when solutions are needed for many things. It is up to both teachers and learners to consider solutions BEYOND that which is known.

I feel I really have done my job well when students express thinking beyond what I know. They are stretching that “gray matter” to extend thinking outside the box. There is a perk in all of this, as my students become my teacher, helping me to add to my own learning.
It is the growth, progress and feedback of my students of which I am most proud, but I was unaware of this one. One December a number of years ago, I received a letter from a former colleague who asked me if I remembered one of my students, Susie Boyer. At that time it had been 12 years since I had taught Susie in fourth grade at Barrington School in Upper Arlington, Ohio, a suburb of Columbus. She visited my colleague in her classroom and asked her if she knew where Miss Brady was. Elma said she did and told her about my family and me. Susie said, “If you write her, would you please tell her that she is the reason I’m becoming a teacher!”

This past week I received a printout of what graduating seniors said about various professors. One student wrote that “Dr. Matanzo made me feel like I could do anything!” Hip, hip, hooray, she’s starting to think in possibilities! Remember, students and others are not things to be molded, but people to be unfolded.

Thank you for giving me the opportunity to “unfold” today and to experience my possibility of being FAU’s 2000 Distinguished Teacher of the Year with all of you.

References:


Note from Dr. Matanzo, who kindly located and reconstructed her Distinguished Teacher of the Year speech for posting on this website in 2012:

When this speech was delivered, I read from the original resource or retold what was written in the storyteller’s own form. I have shared many of these stories and facts in my classes from memory, but 12 years after delivering the original speech, much of it extemporaneously, I could not locate some of the resources to reference them. I had no
intent to take credit for someone else’s writing or research, but wanted to inspire and encourage audience members to think in terms of possibilities by sharing a variety of sources I’ve encountered through my many experiences and endeavors.