

STEAM 2012 Challenge Opening Speech

Welcome to the STEAM 2012 Challenge!

Thank you, Jennifer, for inviting me to open this great event for our youth [and others]. As a research analyst at NASA during the Apollo program ... many moons ago ... it's a pleasure to be here today to help our youngsters understand the importance of scientific query, or the utilization of The Scientific Method. And I hope they will develop a greater sense of appreciation for the Sciences and Technology to the point that many of them will have the desire, and see the need to make contributions later in their lives as research analysts, scientists, and engineers.

If you are currently a part of this audience, our country needs you in this respect as well as other aspects of society that maintain our standard of living. It needs you so we can continue to compete on the global stage, so we can sustain our leadership role, so we can be the kind of country we have always been ... a great society of “dreamers”, “believers”, “movers and shakers”, “doers” and “achievers”.

This is really what this summer camp is all about. It's called empowerment, and if we as adults can empower you ... our youth ... to recognize this importance of making scientific and technological contributions ... through your imagination and skills ... to our society, this great country of ours will continue to move forward and upward. It's up to you ... the next generation ... to carry the torch, to begin to prepare, NOW, so you ... all of us ... can have a better life, be happy.

After all, isn't that what all people want in life, happiness? And what is happiness? First of all, I believe happiness is knowing that you have a good education, secondly being satisfied with the contributions you are making in your profession ... on the job ... and thirdly feeling content about who you are and how you are with others.

In conclusion, my students ... 8th graders ... were here in Dublin just a few weeks ago working with the Dublin ISD intermediate and middle school students to learn graphic arts software to visualize Space weather and the NASA Magnetospheric Multiscale 2014 Mission information for greater understanding and retention of that information. Students were interacting ... teaching and learning ... with students at as a professional level as possible for their age. They empowered each other through this activity.

The teachers present ... including me ... seemed secondary to the process because of this peer interaction, technology ... hardware and software ... and the innovative approach of visualizing information to make Digital Art. The workshop sessions were intense because of their anticipation of producing a finished product, “Space Weather and NASA MMS Art”. And they walked away from this creative process knowing, and remembering more about the content ... having a cognitive experience.

For this old research analyst, artist and teacher of 7th and 8th graders, engagement for empowerment is the key to genuine learning, and a “dash” of technology adds an excitation factor and facilitation, which is needed in today’s classroom. I wish everyone great success over the next two weeks with the STEAM 2012 Challenge.

Thank you.

Tom R. Chambers, Teacher, Technology Applications

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