Education's Problems Solved at Last!

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For the last decade we have seen a tremendous amount of concern about education, leading to the *No Child Left Behind* Act, and its emphasis on high-stakes testing. Detractors have made a big deal out of the idea that education has turned into a test-preparation activity, rather than having its focus on real skill development, creativity, dynamic problem-solving, etc. Hey, folks, get a clue! You take a test, you are free to forget what you learned. Actually learning stuff clutters up the brain, and you might not actually use everything you learned anyway, so why waste your brain cells?

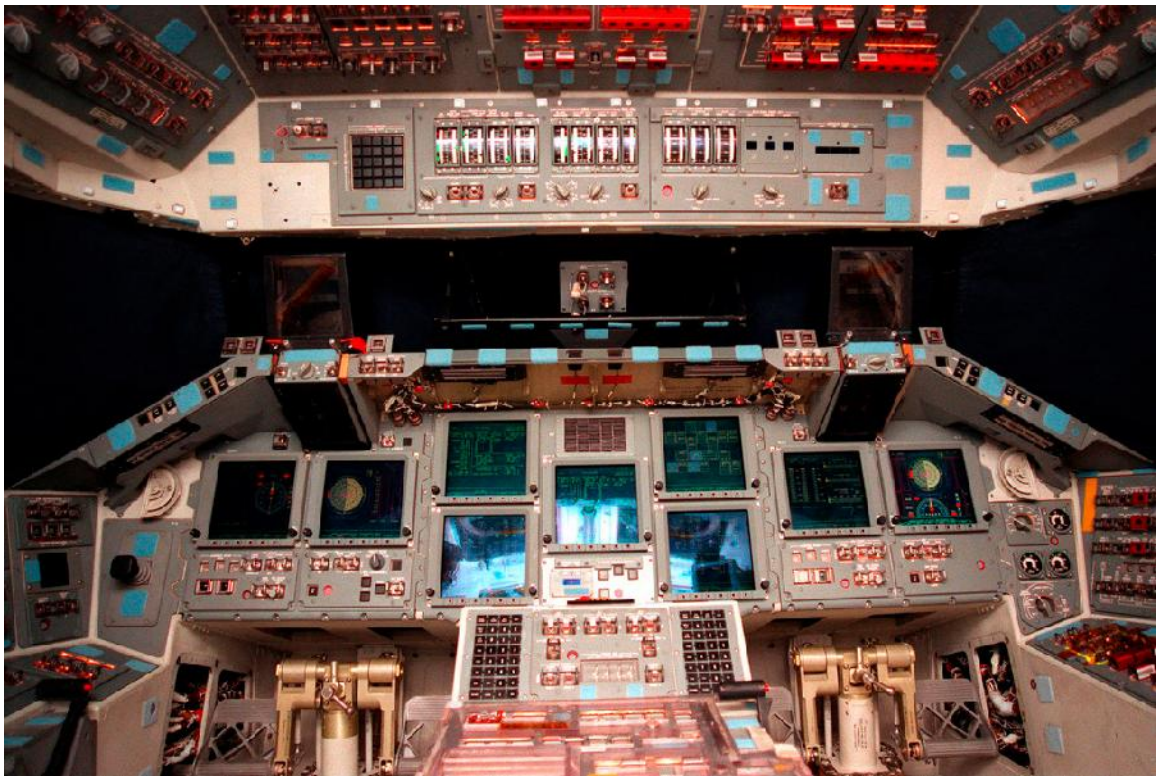
This kind of criticism is enough to make you break a #2 pencil!

In this brief article, I'd like to suggest another viewpoint. Since educational leadership at the highest level has refused to change the focus of K-12 practice, we should see what we can adopt from this recalcitrance for the benefit of our kids once they leave school. In particular, I want to focus on STEM education since that seems to be the big topic getting a lot of attention these days. First, I think the topic is overblown. Who cares about STEM skills when *Dancing With the Stars* is on television? WHERE ARE YOUR PRIORITIES, AMERICA!

OK, so our kids may not know squat about engineering when they leave school, and have forgotten all the science they learned, but there is one thing they will never forget – something that we can use to our advantage on a global scale (it is so powerful, I'm almost afraid to reveal it, but here goes...)

Our kids know how to fill out a bubble sheet! I'd put US kids up against any in the world when it comes to shading bubbles without going outside the lines! If you count pre-tests, actual tests, and multiply this across subject areas and across the grades, our kids have practically got a PhD in bubble sheet skills.

Now how, exactly, does this help us? Well, let's look at one of the major STEM-based organizations: NASA. The following picture is the shuttle flight deck.



Just look at this thing. It has more buttons than a French accordion! How in heck can we expect children educated in this decade to figure any of this out? To start with, you'd have to actually understand the consequences of twisting every dial, pushing every switch, pulling any lever. In other words, you'd need hands-on experience and the willingness to work hard. Well, we showed how stupid *that* was when we traded real school activities for test-prep.

No, the key to our future is to get rid of all this garbage and replace it with a very simple machine: the bubble-sheet reader.

This machine would be connected to the control systems of the spaceship, and the crew would simply answer a few questions on a bubble sheet, put it in the machine, and before you can say "norm referenced," you are ready to go to Mars!

The next page has a sample sheet containing all that is needed to get us to Mars and beyond!

Oh happy day!

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Instructions: Prior to launch, fill out this form and insert it in the Scantron® Reader to start the mission. ***Note, use a #2 pencil and fill all circles completely, or your spaceship might crash.*** Enjoy your trip.
(Time allowed: 10 minutes)

Is everyone on-board the ship?	Yes ①	No ②	Some still missing ③
Is the fuel loaded properly?	Yep ①	Not sure ②	Is that like fire making stuff? ③
How about the food?	Good idea ①	No cows ②	Spinach is missing ③
Beverages and snacks?	Soft drinks ①	Beer ②	Wine ③
Where do you want to go?	Mars ①	Moon ②	McDonalds ③
Do you want to land there?	Yes ①	No ②	Do I have to? ③
What is the optimal speed? (take into consideration Lagrange points and space debris)	100 km/hr ①	Millions km/hr ②	1.9643 au/week ③
Did you pack enough clothes?	Yes ①	No ②	Left my Lakers shirt behind ③
Planning on coming home?	Yes, please ①	No need ②	What home? ③
When?	In time for NCIS ①	Next year ②	When I get a real job ③

When finished, insert the form in your command module's Scantron® reader. Passing score results in launch. Failing score destroys all life on-board.

Note: This briefing is designed to stimulate conversation around a very serious topic, and have a little fun at the same time. In the event you'd like more help restoring a non-bubble sheet model of education, please contact the author.

About the author:
Dr. David Thornburg is the Founder and Director of Global Operations for the Thornburg Center for Space Exploration. He is an award-winning futurist, author and consultant whose clients range across the public and private sector throughout the planet. He is also the inventor of the Educational Holodeck, a flexible learning environment that is both immersive and interactive, and unlike any classroom you have ever seen.

As a graduate of Lane Technical High School, one of the oldest "progressive" schools in the United States, David is a strong proponent of inquiry-driven project-based learning. His presentations and workshops on this topic have been given in several countries, and form the topic of some of his speeches at conferences and schools.

His educational philosophy is based on the idea that students learn best when they are constructors of their own knowledge. He also believes that students who are taught in ways that honor their learning styles and dominant intelligences retain the native engagement with learning with which they entered school. A central theme of his work is that we must prepare students for their future, not for our past.

David splits his work between the United States and Brazil.

To bring Dr. Thornburg and/or his team to your school, district, conference, or event, contact him directly at dthornburg@aol.com.