

3-12-23 (Revision 5-10-24) **John Droz**, jr.

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Email the author for any questions, comments, or suggestions for improvements, as this Report is a work in progress: "aaprjohn" at "northnet" dot "org".

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Chapter 1: What's the #1 Education Problem?

We've been told by multiple parties, that trying to fix the US Education system is a fool's errand, and only indicates that the aspirants are gluttons for punishment. Maybe so, but there is simply too much at stake to let things continue on their current trajectory.

A major part of the challenge here is that there are so many serious problems with the education system bureaucracy, that it's hard to appreciate what are the most important issues *and* which ones need to be tackled first. It's a daunting challenge.

FYI, the primary audience for this Report, are state Boards of Education and Depts. of Education.

My top two candidates are **not** what have been commonly chosen. This is one reason that we are not making sufficient progress. The number one education issue is: **We are not producing** graduates who have the ability to critically think, *and* have an interest in doing that.

Why is teaching Critical Thinking a Big Deal?

The ability to Think Critically is extremely beneficial in almost *every* aspect of life, like choosing a spouse, managing finances, deciding on whom to vote for, etc. See this <u>summary</u>.

An important example is that an academic graduate going into the business world with Critical Thinking skills, has an extraordinarily powerful tool at their disposal. For example, it gives them the ability to adapt to a wide variety of employment opportunities and careers. *Flexibility* is a keyword for succeeding in today's fast-moving job market.

This <u>article</u> is a dire warning. The clear message is that with the incessant promotion of computer models and artificial intelligence, anyone who is not a Critical Thinker will be left behind and is likely to be frequently victimized.

Critical Thinking recognizes no racial boundaries or economic limitations. As such, it is a major asset for minorities and financially disadvantaged students and citizens to make their life better. Much better. Martin Luther King, jr. fully appreciated this and insightfully <u>said</u>: *"The function of education is to teach one to think intensively, and to think critically."*

Also important, Critical Thinking gives citizens the ability to see through the innumerable ruses being perpetuated on our society today by bad actors. Without the ability to do Critical Thinking, education graduates will repeatedly become easy marks of those who are cleverly packaging a wide assortment of self-serving agendas.

Lastly, due to the Internet, Critical Thinking is especially important today. It's *good* — and *bad* — that there's more information available to us than ever before. When we ask for a glass of water we get fire-hosed. Critical Thinking skills are needed to separate the wheat from the chaff.

What exactly is Critical Thinking?

A school's objective should be to teach children **HOW to think**, not **WHAT to think**... A **layperson's definition** is that Critical Thinking is looking at things **wider** and **deeper**. Let's take an example where a developer has proposed an industrial wind facility for a community.

The developer says that in this community's decision-making process, the only consequential considerations are that: **a**) their project will be a financial windfall for the community, *and* **b**) it will be helpful in saving the planet.

Looking at this more **broadly** we find out that there are *other* major considerations not mentioned by the developer: **c**) health impact on nearby citizens, **d**) environmental impact, **e**) impact on a nearby military base, etc.

Looking **deeper** into the developer's claims we find that their calculation of a local financial windfall does **not** take into account any negatives — like home devaluations, agricultural losses (due to bat deaths), tourism drop, etc. An *objective* and *comprehensive* **net economic calculation** turns out to be **negative!** Further, their assertion about wind energy saving the planet is not scientifically proven — it's just marketing talk.

The takeaway: if Critical Thinking isn't done, these citizens will be taken advantage of.

In this case, Critical Thinking is necessary to make a more informed decision!

The **academic definition of Critical Thinking** (substantially condensed from <u>here</u>) is that it is the intellectually disciplined process of skillfully synthesizing, conceptualizing, and evaluating information, as a guide to belief and action.

Critical thinking can be seen as having two components: **1**) a set of information processing skills, *and* **2**) the habit, based on intellectual commitment, of continually using those skills (grounded in fair-mindedness and intellectual integrity) to guide behavior.

Despite good training and best intentions, no one is a critical thinker 100% of the time, as everyone is subject to episodes of undisciplined or irrational thought.

One's level of Critical Thinking quality is a matter of degree, and dependent on factors like attentiveness, commitment, interest in objectivity, etc. concerning particular issues. For this reason, the development of Critical Thinking skills and dispositions is a life-long endeavor.

Unfortunately, there are those who *claim* to be teaching Critical Thinking but are not. Interestingly (see <u>here</u>), to be a good Critical Thinker, it is necessary to have a firm grasp of fundamentals and "lower-order thinking." However, that idea is out of vogue, as *Common Core* proponents <u>dismissed these skills as mindless busywork</u> that needed to go. Big mistake...

For more detail, read this thorough report: Critical Thinking: What It Is and Why It Counts.

Chapter 2: What's the #2 Education Problem?

After decades of pouring money and manpower into trying to improve the US education product: **are we happy with the results?** For example, the fact is that out of some 70 PISA countries, the US ranks about <u>25th in Science</u>... *Is this acceptable? How did that happen?*

Hopefully, we are in full agreement on the response to the first question: NO...

Regarding the 2nd, IMHO a major reason for our middling results is that too often the K-12 education system is being unduly influenced by people with good intentions, but for a variety of reasons, they are unable (or unwilling) to see the Big Picture of what is going on. Anyone with that deficiency, will not likely be able to come up with meaningful solutions.

Hopefully, a silver lining of the dark COVID cloud is that the education system was shaken up enough that insightful education leaders will finally say: **let's go about fixing this differently!**

In applying Critical Thinking, the answer is to take a rifle approach *vs* a shotgun strategy. Then we need to pick what is the most impactful target to aim at. I'm boiling down the education system to just the **K-12 part** and all of that to only the **curriculum**. (For more explanation about what the curriculum is and why it's important, see <u>Appendix H</u>.) The entire curriculum is then further distilled to just the **Science** curriculum — i.e., Science standards.

(To keep the three Chapters of this Report brief, more details are provided in the Appendices.)

My vote for the number two education issue is:

The corruption of the curriculum — particularly in Science.

The Left knows that the curriculum is paramount, which is why they have taken over the Science standards of almost all the states. Our children are now graduating from K-12 with a sub-par Science education, plus superior indoctrination of <u>Progressive</u> ideology.

This is almost entirely attributable to <u>A Framework for K-12 Science Education</u> in combination with the <u>Next Generation Science Standards</u> (NGSS). {See Appendices for more details.)

FYI, the well-known *Fordham Institute* <u>rated</u> each state's Science Standards, and gave the NGSS a "C". Why would any state adopt a "C" rated set of Science standards? Worse, the Fordham rating is very generous, and when all factors are considered the NGSS should get an "F".

Some may claim that the *Framework* and *NGSS* were needed to improve the Science education of K-12 students. However, the data say <u>otherwise</u>. When analyzing the U.S.'s results over the last decade, it's clear that there are **not** any genuine signs of real improvement...

In fact, there's been no detectable change in U.S. students' Science scores since 2006. (The *Framework* came out in 2012, and *NGSS* in 2014.) **Neither has improved K-12 Science scores!!!**

Let's be clear: there are some good elements to the NAS/NGSS. However, there are also multiple major embedded liabilities. So what did a cursory examination of the NAS Framework/NGSS reveal? **Ten serious deficiencies**. Here is an outline of each:

- 1-It does not teach Critical Thinking. Worse, it promotes the opposite of Critical Thinking: conformity with current political fads. (Here is a basic <u>explanation</u> of Critical Thinking. Read this good <u>Report</u>, plus a <u>website</u> dedicated to Critical Thinking. Also, see <u>Appendix G</u>.)
- **2-**It eliminates the *Scientific Method, and* fails to explain how it handles complex matters. (*Read this two-page <u>discussion</u> of the Scientific Method, plus <u>Appendix F</u>. As explained in the above <u>explanation</u>, the Scientific Method and Critical Thinking are different things.)*
- 3-It inappropriately lumps scientists and engineers together.

(In an attempt to fill the void created by their unwarranted scrapping of the Scientific Method, the authors fabricate a newfangled "<u>Science and Engineering Practices</u>." Read these two insightful explanations of some of the major differences between Science and Engineering: <u>here</u> and <u>here</u>. Note that there were no public discussions of the pros and cons of this concocted alternative in the Science community. Also, see <u>Appendix F</u>.)

- **4**-It fails to delineate the difference between Real Science and political science. (*See the explanation in <u>Appendix E</u>, including ten examples that need to be discussed*.)
- 5-It gives an unwarranted endorsement of computer models. (See this good commentary.)
- **6**-It fails to define what is a Scientific Analysis, and explain its major importance. (*See the explanation in <u>Appendix D</u>, including the four key criteria that need to be met.*)
- 7-It disparages linear thinking. (For good discussions about this see: here, here, and here.)
- 8-It endorses progressive ideology (e.g., it has an undue emphasis on equity).
 (No such emphasis was given to Critical Thinking or the difference between linear and lateral thinking, etc. See <u>Appendix L</u> and <u>Appendix M</u> for more details... Matters like <u>SEL</u> (Social-Emotional Learning), <u>DEI</u> (Diversity, Equity, & Inclusion), <u>CRT</u> (Critical Race Theory), and <u>Wokism</u>, etc. are very threatening to the US education system. Although these also appear boldly in subjects like History, the roots for these are in the Framework and NGSS i.e., now the Science standards of some 49 states...)

9-It effectively endorses the religion of atheism. (See the explanation in <u>Appendix N</u>.)

10-It has some of the major deficiencies that afflicted Common Core (see <u>Appendix O</u>).

Regretfully: **a)** almost no parents, teachers, scientists, or conservative organizations have publicly gone against these poor Science standards, *and* **b)** some three million propagandized HS graduates (new citizens) are injected into our society each year. These have emboldened the Left to *expand* their Woke, DEI, CRT, SEL, etc. efforts. See this powerful <u>talk</u> about just how consequential this threat is. Do we really want <u>Marxism</u> to infest the minds of our youth?

Chapter 3: What's the Solution?

We are already making great progress in this Report, as we have quickly zeroed in on the top two US Education system problems. Most education reformers don't get that far — or they identify other problems (like school choice) that are **not** the top priority (see <u>here</u>).

The solution to both of these major K-12 problems is straightforward: **Properly fix the state's Science standards.**

If your state is one of <u>49±</u> that has basically adopted the NGSS, the two likely best options are:

a) Make multiple changes to the NGSS, or

b) Modify another state's good Science standards.

Regarding "b", the best other state candidates to consider would be those that received the highest ratings in the *Fordham Institute's Report*.

The simplest way to know what needs to be done for either option is to closely study the eight (8) failings of the NGSS (<u>Chapter 2</u>), and make sure that each is properly fixed.

If this is done right, the Critical Thinking problem will also be addressed. Considering how important that is, it would be advisable for the State Department of Education to also:

- Publicly identify that Critical Thinking is the state education program's #1 goal.
- Specifically, instruct Science teachers that this is a top priority for them to impart.
- Mandate Science teacher in-service training so that they know how to properly teach Critical Thinking.

It would be a wise strategy to give a good descriptive name to the state's upgraded Science standards — like **NGISS** (*Next Generation Improved Science Standards*).

Note: I am **not** saying that this major change will fix ALL education problems! Other issues (e.g., school choice) still need to be addressed. However, making this one change will fix something like 60% of the education system — a profoundly important improvement.

Here is a must-watch one-minute video. It sums it up nicely, and it applies countrywide.

PS: I have great respect for teachers. However, in the education bureaucracy, they are often pawns of parties promoting political agendas. Science teachers are victims starting with the Science miseducation they get to obtain their teaching degree. The Left knows full well that teachers are an important link in this chain, so they have made sure that teaching schools are on board (especially in Science and History). This education component also needs to be addressed, but fixing state Science standards takes priority.

Appendix A: Who Am I?

NOTE: All of the Appendices are **optional** material. The primary messages are conveyed in the three prior Chapters. The Appendices are simply supplements that provide further elaboration.

The veracity of what is in this Report should have nothing to do with who I am but rather be based on the merits of the arguments presented. That said, a favorite tactic of the Left (when some of their agenda is exposed) is to try to demonize the source. I'm just the messenger here.

Who am I to be writing about fixing the US K-12 education system?

Probably my highest credential is that I'm **not** part of the official education system. I never received a teaching degree and never worked in school administration. That means I've never been taught things like the answer to education questions is: "that is the way we've always done it." In short, I'm an outsider — which I take as a badge of honor

The super-brief background about me is that I am a scientist — a physicist to be exact. If you would like to discuss my qualifications, let me know and I'll explain.

I have had an interest in our education system for quite some time. I've been on two local private school boards for a total of over ten years — even though my wife and I had no children in either school.

As another example, in 2012, I gave a <u>talk</u> to the US Congress — sponsored by the House *Science and Technology Committee*. It was so popular that they made the unusual arrangement of having me give it **twice** the same day, in a large auditorium... A major part of my talk was about some of the serious failings of our education system.

Some problematic education matters I discussed back then were:

- Not teaching Critical Thinking
- Grade inflation
- Dumbed-down courses
- Purposeful political propaganda (esp in History and Science)
- Too much cheating, etc.

My talk was well-received, *but* not much was done. There are several reasons for this. For example, in my experience, some educators have an elitist attitude, as they believe that anyone outside of the education community (like me) is an intruder.

— continued —

Too often in the past when a trespassing neophyte (*that's people like me*) make constructive suggestions, they are thanked, but then mostly ignored. The view of *some* education employees is that: they are the **experts** and t**hey know what they are doing** — so we should stay out of their lane. (*But do the international test results support the contention that they know what they are doing?* No!)

This is one reason that my education focus is now on **SCIENCE** standards and curriculum. In this case, I am the **Science professional** — not the person teaching K-12 science. That teacher rarely has an advanced Science degree. In other words, they are now in MY lane.

We are too often lectured by people who are not following their own advice. (Think Mr. Al Gore pontificating about us restricting our CO2 footprint, while he generates huge amounts.)

I'm a big fan of Critical Thinking as I was taught the benefits in K-12, and then Boston College and Syracuse University. It subsequently served me well in my science and then managerial jobs at GE Aerospace, as well as in life after that. Here is one condensed example...

In my early twenties, I very much enjoyed my work at GE. That said, there were other interests I had (*like fixing the education system*!). I decided that I wanted to retire by the time I was 40. Thus began a critically thinking adventure as to how to make that happen. The super-short version is that I decided to invest in single-family vacation homes and rent them out. After a lot of hard work, combined with creative, Critical Thinking, I retired at age 34.



I am privileged that a very competent Brazilian artist chose to do a drawing off me. Thank you Thiago!

Appendix B: How did the NGSS Fiasco Happen?

The US education system is a bloated bureaucracy. One of the results is that numerous problems have arisen. Some of the issues are listed in this good <u>article</u>:

- School choice
- End funding for Planned Parenthood-endorsed sex education programs that include pornographic content.
- Strip power from the Leftist teachers' unions.
- Stop public libraries from being used to distribute obscene materials.
- Remove and defund any semblance of social justice ideology and critical theories from our K-12 and college systems.
- The state's teacher certification system that requires educators to adhere to Leftism in order to teach here.

These are all concerns that should be fixed! However, all of these pale in comparison to the incessant daily harm done to tens of millions of US K-12 students, who are being fed misinformation, false information, Marxist ideology, etc.

For whatever reason(s), fixing the curriculum issue has fallen through the cracks.

Now you may think that this is just an academic tiff in a teapot, but since it was introduced back in 2014, some <u>forty-nine (49) states</u> have now officially adopted all or most of this regressive ideology! This success is due to:

- 1) effective marketing,
- 2) powerful forces pushing this regressive effort,
- 3) no real alternative has been proposed,
- 4) no organized effort against *Framework/NGSS* by Conservative organizations, and
- 5) State education boards not paying sufficient attention.

So, who are some of the forces behind the *Framework* and *NGSS*? The overall process was <u>managed</u> by <u>Achieve</u>, the <u>National Science Teaching Association</u> (NSTA), the <u>National Research</u> <u>Council</u> (NRC), and the <u>American Association for the Advancement of Science</u> (AAAS). None of these are centrist organizations, as they are Left-leaning at a minimum.

Appendix C: Political Ideology Undermining US Education

This Appendix is very important as it connects the dots in some areas that you may not be aware of. So stand back a bit and give some Critical Thought to what is a sophisticated strategy to undermine America, by miseducating our youth.

We MUST remember that the Left plays the long game, and is willing to wait decades to get their desired result. Most Americans don't think like that, as we have been programmed to get what we want *now*. *Guess who is likely behind that?*

Reminder: throughout this Report, I use the terms Left and Progressive interchangeably.

Emphasize K-12 Education

The idea is that the younger the better, as children are easier to propagandize. Also by doing this, a solid foundation is constructed for higher-ed indoctrination.

Make Teachers to be Allies

They have successfully infiltrated colleges where teachers are trained. E.g., if Science teachers are miseducated about Science, it is easy to have them pass this on to students.

Support Grade Inflation

Consistent with the Left's *equity* agenda of *equal outcomes*. Inflated grades also help assure that real learning is minimized since nominal efforts are richly rewarded.

Assert that Critical Thinking is their Priority

This false assertion is to distract trusting souls, or those not paying attention, as the opposite (**conformity** and **compliance**) is actually what is being taught.

Focus on K-12 Science Education (NAS Framework)

Science is where **Critical Thinking** should be taught, as real scientists are *skeptics* and question things. The Left does **not** want to teach this to students, so the K-12 Science standards (based on the *Framework*) are divorced from Critical Thinking.

Embed Political Agendas in K-12 Science Standards (NGSS)

Scientifically debatable technical topics (like climate change, renewable energy, fossil fuels, etc.) are inaccurately presented as scientifically resolved. If they were genuinely teaching Critical Thinking, they would **objectively** and **comprehensively** present the pros and cons of such technical issues — and then let students reason.

(continued on next page)

Embed Progressive Perspectives in K-12 Science Standards

Replace linear thinking with lateral thinking, which is more consequential than it seems. *For example*, the Left says linear thinking is an indication of <u>whiteness</u>. *For example*, the Scientific Method is excluded from the *Framework/NGSS*, as "it promotes linear thinking."

Make a Moral Case for their Framework and Standards

Value messages like justice, equity, etc. are incorporated into Science materials. For example, the <u>Framework</u> has a full chapter on Equity (much more than it has on Critical Thinking). *Who made up these values, and where are they written?*

Have the Framework and Standards advocate a Secular Religion

The *Framework* and *NGSS* should take a *theistically objective* position on topics like the creation of the universe, etc., but they consistently take the **atheistic** perspective.

Use Terminology as a Barrier to the Public's Understanding

The authors of these materials often use pedagogical words like "frameworks," "crosscutting," etc. that have two intentions: **1)** to impress the public with their competence, and **2)** to <u>obfuscate</u> what is going on.

Employ Deference to Authority to Sell the Framework and Standards

These Science standards (and their embedded messages) were created by education experts and supposedly vetted and approved by a "representative cross-section" of "stakeholders," so who are you to object? The message is: *butt out!*

A strong case can be made that there is no more important American societal matter that needs to be immediately fixed, than the inferior education (and miseducation) currently being provided to our K-12 children. It's clear that ideas like *school choice* have merit for some individual students — but abandoning our public education system to the Left is not in America's best interest, or ours.

It's up to parents, citizens, teachers, scientists, conservative organizations, etc. to stop complaining and start taking meaningful steps to stop this ongoing carnage.

Appendix D: What is Science?

The conventional view is probably that most scientists (like me) are geeks with limited social skills, like <u>The Big Bang Theory</u> characters. However, scientists **are** real people, which is both good *and* bad. For example, who would a thunk that while working on Relativity, that Einstein would be daydreaming about kissing girls? This is what he <u>said</u>:

"Any man who can drive safely while kissing a pretty girl, is simply not giving the kiss the attention it deserves!"

We hear the term "Science" all the time. In fact "Science" has an exceptionally high <u>public</u> <u>approval rating</u>. But I contend that this is a conundrum, as **most people** don't even know **what Science actually is**. So here's the key question: *what IS Science*?

The clothes you're wearing, the food you ate today, the vehicle that you drive, the building you are in, the lights in the ceiling, the computer you are using here — all come from scientific discoveries... These are based on **generations** of scientists using **logic** and **deductive reasoning**, carrying out **observations** and **measurements**, **formulating** and then testing **hypotheses** and **theories**... But, Science is **not** a collection of theorems and equations.

These are two good observations:

"Science is a **way of thinking**, much more than it is a body of knowledge. Our species needs, and deserves, a citizenry with minds wide-awake, and with a basic understanding of **how** the world works." — <u>Dr. Carl Sagan</u> and

"Science has its weaknesses and it doesn't have a stranglehold on the truth. However, Science has a way of approaching technical issues that is a closer approximation of truth than any other method we have." — <u>Dr. Richard Muller</u>

I don't know about you, but to me, those insights should tell us that teaching Science properly is a **really** big deal.

The term "Science" comes from the Latin word "<u>scientia</u>," which means "knowledge." The question is: **how do we <u>obtain</u> knowledge in technical areas?...**

Over thousands of years, we've worked out a **methodology** for discovering the technical truths of our universe. That is what the field of Science is really all about. **Science is a** *Process***.**

The understanding that Science is a <u>Process</u>, is **critically important** for our evaluating claims that are supposedly *based* on Science. The question always should be: *did* — *they* — *follow* — *the* — *Process?*

OK, so what is this Process? The traditional basic **process** is the <u>Scientific Method</u>. This is applicable for most things we'd like to evaluate. The only variable that might change is step #6. An *appropriate evaluation* for simpler matters would likely only involve a simple test. For complex technical issues (like climate change) this would change to a **Scientific Analysis**.

So what is a **Scientific Analysis**? These are the four key elements:

1) Objective, 2) Comprehensive, 3) Transparent, and 4) Empirical.

When advocates make some complex technical claims (e.g., that wind energy will be a meaningful part of solving climate change), our response is very simple: *show us where a genuine Scientific Analysis has been made of your claims...* Using these four criteria it will be very clear whether we are dealing with *Science* or *snake oil*.

Science without the proper *Process* is not Science! Call it whatever you want — political science, pseudo-science, junk science, astrology, etc. but it is **not** true Science.

Since Science is the **enemy** of those promoting self-serving political and economic agendas, we need to be aware of the many deceptions they use to fool uneducated souls.

As mentioned earlier, in my 2012 talk to Congress I identified **15 ways** that Science is being undermined, and citizens are being deceived. Every one of these matters *should be* covered at some time in K-12 Science education. The painful reality is that almost none of them are.

An overview is that the Progressives are trying to substitute **political science** for **Real Science**. This is one of the major scourges of our time, so students MUST be educated about this cancer. See <u>Appendix E</u> for a further discussion of this.

This is a superior observation:

"In the public arena, alarmist rhetoric over complicated issues has tended to drown out calm, rational discourse. Politicians and government regulators have made public policy decisions based on **false** or **fragmentary** information.

"As a result, a host of unscientific, intrusive, and counter-productive government policies have become **commonplace**, including takings of private property, bans of harmless substances, unwarranted liability court awards, byzantine bureaucratic controls, *and* regulatory measures that endanger economic growth, public health, and the environment."

Note that this was published before the COVID fiasco.

Appendix E: Political Science *vs* **Real Science**

This is all about America. Many things make America the most unique country in the history of the world. For example, it was founded on **Judeo-Christian principles**. For another, it was rooted in **individual rights and freedoms**.

Consider our <u>Declaration of Independence</u>. Among other inspiring things it has this sentence, which incorporates **both** of these key values:

"We hold these Truths to be self-evident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness..."

It should be no surprise that there are very powerful forces in the world that oppose **both** of these. China, for example, is an atheistic, communist country. That means that they oppose Judeo-Christian teachings, *and* they oppose individual freedoms.

Despite the obvious threat China, Russia, and other such countries pose to America, the most imminent peril is from within. Abraham Lincoln warned us of this in his <u>Lyceum speech</u>. Lincoln was a wordsmith extraordinaire, so the whole address is inspiring. The relevant part is this:

"At what point is the approach of danger to be expected? I answer: if it ever reaches us, it must spring up among us. It cannot come from abroad. If destruction be our lot, we must ourselves be its author and finisher. As a nation of freemen, we must live through all time, or die by suicide."

Now let's fast forward to current times. Our sophisticated enemies are using a multi-prong approach, knowing that their chances of success are better if several aspects of America are attacked simultaneously. One of the best overviews of that is the <u>short trailer</u> for the movie *Grinding America Down*. It is well worth watching this 4± minute overview.

In the multi-pronged anti-American attack we are being subjected to, Science is arguably the most powerful weapon of our adversaries.

Why? For three important reasons: **1)** Every survey done confirms that American citizens strongly support Science — and well they should. **2)** These same citizens have almost no understanding of what real Science actually is, and **3)** We are a technical society so he who speaks for Science, can easily control our country.

As a professional lifelong scientist (physicist), let me emphasize that Science is **not** the problem here, as Science is our friend and ally. What is happening is that bad actors (sometimes scientists) are misrepresenting real Science (due to the above three points).

What our opponents are really doing is trying to replace **genuine Science** with *political science*. They get away with this, primarily because of point #2 above: *that citizens have little understanding of what real Science actually is.*

The phrase *political science* is just one of many things the Left has cleverly and deceptively worded (e.g., see <u>here</u>). What *political science* is, is **political agenda advocacy** — which has zero to do with real Science. **Science, by definition, is apolitical**. What's disturbing is that the advocacy here is *against* American freedoms. So how is this happening today?

Take Climate Change. Our freedoms are being chiseled away. For example, our choices in what electricity sources are on the grid, what car we drive, whether we use a gas appliance, etc., etc. are all being restricted — and based on *political science*. This is death by a thousand stings.

Take COVID. Since they are getting away with the gradual Climate Change extraction of freedoms, with COVID they were emboldened to try an even more aggressive removal of our freedoms. As a result, we lost the right to visit a loved one in a nursing home, our child was not allowed to go to school, religious services were canceled, we were forced to wear an ineffective and unsanitary mask, our doctor was prohibited from prescribing effective medication for us, etc.

We were falsely told that the justification for all this was "Science." This is why Science is arguably the most powerful weapon of our adversaries. But remember: we are **not** dealing with real Science here, but rather *political science*.

How do citizens separate the wheat from the chaff regarding what is and is not Science? By having a solid Science education, particularly in K-12!

Once we understand some of why anti-Americans fully appreciate the profound importance of K-12 Science education, we'll understand why a group of Left-leaning academics and organizations decided to codify their views as to what should be (and should not be) being taught in US K-12 schools. An accurate name for their product is "**K-12 Progressive Science Standards**."

Have you heard of those standards? No, as such clandestine efforts are never named accurately. *Why not?* Because it would give away that it is all about promoting **regressive** political science agendas, **not** better educating our children about real Science. Even the trusting and technically challenged public would object to that.

As mentioned above, Progressives are skilled at using the vernacular to promote their agendas. So it was when they decided to take control of the K-12 Science curriculum. They started by getting the Left-leaning NAS/NRC to be the lead agency. The tactic here was to give their regressive ideology some credence — *aka* **credential prestige**. Their underlying effort was called: <u>A Framework for K-12 Science Education</u>. Sounds innocuous enough, right? Sounds like a worthy, objective, professional effort. Well, it's a vehicle to indoctrinate our children with regressive dogma: so a *Trojan Horse* would be a better description.

After the *Framework* was released in 2012, another group of Progressive activists moved the baton along. They took this collection of Left-Wing tenets and molded it into something that State Education Boards could use. These were their proposed K-12 *Science standards*.

Once again they had to come up with a description that would fool the trusting and the unwary, so their genius name for their subversive effort is <u>Next Generation Science Standards</u> (NGSS). Is anything threatening conveyed there? Who would be against teaching our kids the next generation Science standards? Begrudging kudos to the Left for their linguistic skills.

The **overall objectiv**e of the *Framework* and *NGSS* is to start replacing real Science with *political science* — i.e., political agendas.

I gave a talk in 2012 sponsored by the House *Science and Technology Committee*, about how Science is being threatened. Here are the <u>slides</u>.

I identified fifteen (15) ways that this was currently happening. Here are ten (10) that relate to K-12 Science standards becoming more about political science:

- 1- Using Consensus to imply Correctness
- 2- Using Peer Review to imply Accuracy
- 3- Using Scientists to imply Scientificness
- 4- Using Computer Models to imply Reality
- 5- Using Correlation to imply Causality
- 6- Using Selective Data to imply Actuality
- 7- Using the Precautionary Principle to imply Reasonableness
- 8- Using Engineering to Replace Science
- 9- Purposefully misusing keywords like *Theory* (i.e., instead of saying *Hypothesis*)
- 10-Adjusting the Raw Data, to Support Political or Economic Agendas

Several of these errors are subtly incorporated into the *Framework* and *NGSS*. None of these political science positions are consistent with genuine Science, so State Education Boards should make sure that none of these Science corruptions are in their state Science Standards.

Even better, State Education Boards should make sure that (included in their state Science Standards) **ALL of these are discussed with students**, so they are in a much stronger position to apply Critical Thinking to the complicated technical issues we are societally facing. A worthy parallel effort is explained in "<u>Do You Know How to Evaluate Truth Claims?</u>".

In other words, an important part of all state Science standards should be a comprehensive and objective discussion of the **political science** *vs* **Real Science** issue.

Appendix F: Does the NGSS Improve on the Scientific Method?

As stated in <u>Chapter Two</u>, some of the eight listed shortcomings of the <u>NGSS/Framework</u> relate to the fact that the <u>Scientific Method</u> has been scrapped.

Some defenders of the NGSS insist that the reason that the Scientific Method was replaced, is that the NGSS/Framework authors created an "improved" version. Before we dispute that assertion, how about answers to questions like these:

- 1 If the Progressive authors were genuinely trying to improve on the Scientific Method, why doesn't it say that anywhere in their <u>Framework</u>?
- 2 The Progressive authors' written explanation for scrapping the Scientific Method is that it promoted "linear thinking." *So what?* That has served us well for some 4000 years.
- 3 If the Progressive authors were genuinely trying to improve on the Scientific Method, why didn't they make a major reach out to the Science community, to solicit ideas and comments, before changing something that has been around for some 4000 years?
- 4 Is it just a coincidence that some Progressives have publicly and specifically attacked the Scientific Method as being a major element of whiteness (e.g., <u>here</u>)?
- 5 The NGSS's "improved" version is a newly fabricated <u>Science and Engineering Practices</u>. Since the authors are focused on political correctness (like *inclusivity*), they wanted to shoehorn more "engineering" into Science standards. The problem is that Scientists and Engineers go about solving problems <u>very differently</u> — so a shared standard is bogus.
- **6** There are strong indications (e.g., #4 & #5) that the Progressive *NGSS/Framework* authors discarded the Scientific Method, as it conflicted with their <u>Woke</u> ideology.

What are the differences between the traditional Scientific Method, and the newly manufactured NGSS *Science and Engineering Practices*? A: Here is the traditional version —

- 1. Ask a question
- 2. Make observations
- 3. Gather background information
- 4. Create a hypothesis
- 5. Make a prediction
- 6. Conduct an appropriate evaluation
- 7. Analyze the results and draw a conclusion about the prediction
- 8. Share the conclusion and decide what to do next

B: Here is the NGSS version trying to replace the traditional one -

- 1. Asking questions and defining problems
- 2. Developing and using models
- 3. Planning and carrying out investigations
- 4. Analyzing and interpreting data
- 5. Using mathematics and computational thinking
- 6. Constructing explanations and designing solutions
- 7. Engaging in argument from evidence
- 8. Obtaining, evaluating, and communicating information

Even a cursory comparison would conclude that there are **substantial** differences.

For example, the new version (in B-2) requires the use of *models*. That may seem innocuous enough, but the clear objective here is to indoctrinate our children into the acceptability — no, **necessity** — to use **models** in resolving technical matters. Again, at first glance that might not seem as problematic as it is, but consider that this is really all about getting citizens to accept as gospel the conclusions of **computer models**.

Computer models are what Progressives have used to justify political actions that do **not** follow from using the Scientific Method — e.g., Climate Change, wind energy, COVID policy, etc. They love computer models as it is extremely difficult to fully disassemble the underlying code — which is where numerous unscientific assumptions are embedded. No one shows the **scientific** basis for such policies, as the retort is: *"This is what the computer model concluded. Are you saying that you are more competent than our most advanced computers?"* [This is a good <u>discussion</u> of some of the limitations of computer models.]

Another delightful difference is B-5: *Using Mathematics and Computational Thinking*. How many people would have any idea what that really means? Read this <u>vain attempt</u> to explain it.

B-7 is yet another stitch: *Engaging in argument from evidence*. What *evidence* might that be? For example, if students are asked to use a newly contrived *model* to see whether climate alarmism is warranted, what *evidence* would they use? And how is **correlation** segregated from **causation**?

The bottom line is that the *NGSS/Framework* authors know that they have no case to discard or modify the Scientific Method — which is why they didn't make a serious one. At no point in the *NGSS* or *Framework* do the authors spell out the "failings" of any of the eight steps in the Scientific Method (*above A*), and then show how their modified version (*above B*) is better.

Further, one of the fabulous merits of the Scientific Method is that it is a **generic problem-solving methodology**, which applies to almost ANY aspect of life — i.e. it has a hugely broader application than just in Science. As a result, learning the Scientific Method has far-reaching benefits for ALL students, not just those going into STEM careers.

None of that can be said about the NGSS concoction. For example, how many everyday problems will citizens say: "I can try to solve this by using mathematics and computational thinking?" None!

Lastly, the number one issue in the K-12 Science standards is the **failure to teach Critical Thinking** (see <u>Chapter One</u>). Carefully compare A and B versions above, and it will be crystal clear that the *traditional* Scientific Method does a **much** better job of getting students to **think critically** — and in ways that apply to numerous real-world situations. That is a VERY BIG DEAL!

Appendix G: NGSS and Critical Thinking

Certainly, the Framework and the NGSS must address and emphasize Critical Thinking, right?

Stunningly, the *Framework* only mentions **Critical Thinking** *once* — and doesn't even bother to define it. So the fact that it promotes lemming-like **conformity** (which is the direct opposite of Critical Thinking), should come as no surprise.

Further, I could find NO mention of Critical Thinking in the actual <u>NGSS Standards</u>! The only thing the NGSS authors say about Critical Thinking is in their <u>FAQ</u>:

- Q: How are Critical Thinking and communications skills, which are fundamental to student success in today's global economy, addressed in the *NGSS*?
- A: "It is important to understand that the scientific practices in the NGSS (as defined by the National Research Council), include the Critical Thinking and communication skills that students need for postsecondary success and citizenship in a world fueled by innovations in science and technology. These science practices encompass the habits and skills that scientists and engineers use day in and day out. In the NGSS these practices are wedded to content. In other words, content and practice are intertwined in the standards, just as they are in the NRC <u>Framework</u> and in today's workplace."

Note #1: This non-sensical answer qualifies as palliative pablum, double-talk, academic puffery, etc. It is indicative of what is too frequently found in the *Framework* and *NGSS*.
 Note #2: I also that I went to the *National Research Council document* they referred to, and nowhere in its 240+ pages is Critical Thinking defined, and nowhere does it say how Critical Thinking can (or should) be taught. An impressive commitment!

The *Framework* and *NGSS* should set an example of how to deal with real-world issues, by **thoroughly** and **objectively** showing that there are **well-documented pros** *and* **cons** regarding technical matters like industrial wind energy, fossil fuels, climate change, etc. Students should be encouraged to do additional objective research, and then come to their **own conclusions** from what the Science actually says, what the **net societal impact** of each is, etc.

Unfortunately, this is NOT what is in the *Framework*. Instead, predominantly **positive** observations are made about renewables (e.g., industrial wind energy), predominantly **negative** comments are made about fossil fuels, and climate change is declared resolved.

The takeaway is that the *Framework* authors are advocating student **conformity** to the *authors'* opinions: e.g., wind energy is a good thing, fossil fuels are bad, catastrophic climate change is a reality, etc. No Critical Thinking is needed, encouraged, or desired.

What's also revealing is that the same educators who dismiss <u>rote learning</u> as a form of <u>child</u> <u>abuse</u>, have no problem buying into it when it coincides with their political opinions.

Appendix H: Why is the Curriculum a Top Education Issue?

Before that question can be answered, we need to understand what the word "curriculum" means in the context used in this report. IMO <u>this</u> is a reasonable definition:

"The term **curriculum** refers to the lessons and academic content taught in a school or in a specific course or program. In dictionaries, *curriculum* is often defined as the courses offered by a school, but it is rarely used in such a general sense in schools. Depending on how broadly educators define or employ the term, curriculum typically refers to the knowledge and skills students are expected to learn, which includes the <u>learning standards</u> or <u>learning objectives</u> they are expected to meet; the units and lessons that teachers teach; the assignments and projects given to students; the books, materials, videos, presentations, and readings used in a course; and the tests, <u>assessments</u>, and other methods used to evaluate student learning. An individual teacher's curriculum, for example, would be the learning standards, lessons, assignments, and materials used to teach a particular course."

In other words, the *curriculum* is where the rubber meets the road, as it is **specifically** about **what** our children are actually taught. Regretfully, almost no one on the Right is doing anything meaningful about this integral part of our education system.

Taking full advantage of this lack of attention, Progressives have aggressively infiltrated the curriculum of subjects like Science and History with deception and misinformation. This results in some *Three (3) Million* propagandized new US citizens *every year*. For America to survive, we simply can not let this continue.

Some people believe that the curriculum is determined by teachers, at the local level. Although there is an element of truth to that, it is mostly a misunderstanding. Here is a brief overview of what is going on...

Every state has a State Board of Education (SBOE). These typically have about ten members, and they are usually politically appointed (e.g., by the Governor). Since they are political appointees, there is a high likelihood that they are there to support or advance some political perspective.

Each SBOE works closely with their State Department of Education. Regarding the topic at hand, they do three key things:

- 1 they approve statewide standards for each K-12 grade and subject area (e.g., Science),
- 2 they approve statewide **textbooks** for each K-12 grade and subject area, and
- 3 they approve statewide **tests** for each K-12 grade and subject area.

Notice that I did **not** say that they approve the "curriculum." *How does that come about?*

It starts with the SBOE **standards.** These are an **outline** for each grade and each subject area, of what material teachers need to cover.

For example, part of the Grade 5, Science standards may say: **"Discuss the benefits of wind energy."**

Now the curriculum — *exactly what classroom words are said, what sequence they are presented in, etc.* — is up to the teacher. This is where the misunderstanding about where the curriculum comes from originates. Yes, the teacher (and local district) have some control over the specifics, but the teacher (and local district) still have to follow the SBOE **standards**, using an SBOE-approved **textbook**, and students still need to pass SBOE-approved **tests**.

Let's take the wind energy example cited above. The teacher is free to do Internet research, to arrange for a wind energy developer to talk to the class, etc.

What the teacher will **not** likely do — certainly not emphasize — is to discuss the **liabilities** of wind energy. That would be not only going outside the SBOE **standards**, but it would be inconsistent with SBOE **textbooks** and SBOE **tests**. Teachers are inclined to defer to authority, so that's a third reason they would not question SBOE standards or textbooks.

One can also be reasonably assured that if the SBOE standard is as stated above, there will **not** be a parallel standard that says: "Discuss the benefits of fossil fuels." Again, without such an SBOE fossil fuel standard, it is extremely unlikely that a teacher will bring this up (again due to the realities of SBOE **textbooks** and SBOE **tests**).

So back to the original question of this Appendix: who is really determining the curriculum?

Clearly, the meat of the material is dictated by the SBOE **standards**, **textbooks**, and **tests**. Teachers have some flexibility regarding the details, but this is like the bride granting her fiancé the authority to pick some *Hors d'Oeuvres* for the reception meal on their wedding day.

One other argument to support my contention here is to look at what the Left is doing — as they are MUCH more organized and effective on such matters than the Right.

The Left has decided: **1)** that they want to infiltrate the curriculum with their ideology, **2)** that the most effective way of doing this is to take control of the state standards in key subject areas, *and* **3)** that the key subject areas are Science and History.

Therefore, their strategy to indoctrinate our youth with Progressive ideology was to: **a**) create the *Framework* (a Progressive bible), **b**) then convert that into a standard's format that states would relate to (the *NGSS*), and then **c**) heavily market it to state SBOEs. There are now some 49 states that have accepted all or most of the NGSS — so you decide who is winning here.

FYI: the Left would **not** be doing this if it wasn't powerful and effective.

Appendix I: Why is Science the #1 Curriculum Issue?

The **Science** curriculum is a *subset* of all the curricula, and the Left is laser-focused on undermining this specific part. Some of the reasons why **Science** standards are being aggressively attacked are:

- a) We cannot maintain our lifestyle, or our position of world leadership, without many more *competent* STEM professionals. Globalists are working here to undermine the competency part, and thus America's leadership.
- **b)** Science is a **gatekeeper** that exposes when political policies on technical matters (COVID, climate, energy, etc.) are nonsense (non-science). When Science is diluted, the protection it offers to our country, and its citizens is severely diminished.
- c) Similarly citizens need a Science background to be able to intelligently understand and apply to their **own life**, today's complex technical issues. E.g., what should they personally do about Climate Change? Progressives do not want Science-educated citizens making *informed* decisions: they want them to do what they are told.
- d) Students need some Science background to be able to do a better job at understanding (and effectively using), the numerous technical gadgets that have become an integral part of our modern daily life. The Left prefers that U.S. students focus on superficial things like social media.
- e) Yet another fluke of our time, is that more children (minors) are being given the authority to make major medical decisions. I'm personally *opposed* to that, but it follows that the more genuine Science education they have received, the better off they will be in deciding about potentially life-changing matters.
- f) Real Science involves polite, open-minded debate about problem-solving. Students need to be taught how to constructively discuss differences of opinion, and they are most likely going to learn this skill in Science classes. We need this ability to counter the Woke mentality that <u>disdains discussion and debate</u>.
- g) In addition to the educational basics (3 R's), we need graduates to be Critically Thinking, problem-solvers. Real scientists are *skeptics* and automatically question everything. As such, Science is the most appropriate subject area to teach both Critical Thinking and problem-solving. Progressives are aggressively working to cut those off at the pass.

Appendix J: Why the Focus on K-12?

In coming to grips with what needs to be done to fix the U.S., bureaucratic education system, I have chosen to focus on the K-12 part. Higher-ed (college) issues often get more publicity, but there are several reasons why we should be paying more attention to K-12.

For example:

- a) What is taught in K-12 is the **foundation** for what is subsequently taught in Higher-ed. If the foundation is weak, no type of subsequently erected elaborate edifice can overcome the underlying lack of structural integrity.
- **b)** The question is: "How important is Critical Thinking in our education process?" and that applies equally to K-12 *and* Higher-ed.
- **c)** The scientific fundamentals learned in K-12 (e.g., the <u>Scientific Method</u>) are carried forward to Higher-ed (and beyond).
- **d)** Embedded in the <u>NAS/NRC Framework</u> is an attack on linear thinking. This issue is also relevant to Higher-ed.
- e) Also infused in the *NAS/NRC Framework* are Progressive ideologies. Once again, these are fully applicable to Higher-ed and later.

In other words, attacking problems in Higher-ed that started in K-12 is not an effective approach. It makes much more sense to nip these in the bud.

Appendix K: NGSS and Politics

Since issuing this Report, I find it interesting that I've heard from a few people who said that there was too much about politics in it. To address that, I'm adding more: this Appendix.

As stated earlier, Science should be **apolitical**. As such I would **love** to have a discussion about K-12 Science Standards where the subject of politics NEVER comes up! However, this Report is largely a critique of the *Framework/NGSS*, so my hands are tied by their content. Repeatedly, the *Framework/NGSS* inject political viewpoints into how they handle the K-12 Science standards.

To earn some badge of honor that the Report does not discuss politics, it makes no sense to simply ignore the reality of what's in the *Framework/NGSS*. Further, much of the politicking in the *Framework/NGSS* is intended to be a detriment to Science. It would be a dereliction of my duty as a lifelong scientist not to defend my profession from these efforts of diminution.

I suspect that the people making such claims are Left-leaning individuals who are annoyed that the charade is being exposed. Someone is saying that the emperor is not wearing clothes! It's likely that no matter what I say here will make any difference to such parties, as they are simply unhappy that the success they have had with the *Framework/NGSS* illusion may be threatened.

That said, here are a few points for others to consider:

- 1 I'm certainly not the only one who is pointing out the Left-leaning Framework/NGSS content. For example, the <u>brilliant</u> Heather Mac Donald <u>stated</u> that: "these standards are troubling in their embrace of the nostrums of progressive pedagogy."
- 2 One of the most disconcerting examples of the *Framework/NGSS* politicization is that they are promoting *political science* as a substitute for Real Science. See a detailed explanation in <u>Appendix E</u>, which includes ten (10) examples of how this is happening.
- 3 This NAS Report eloquently states: "... the NGSS's inadequacy is a result of their politicization. This is not merely a question of substituting climate-alarmist propaganda for science, abandoning the Scientific Method, neglecting the principle of falsifiability, making a cult of scientific consensus, substituting reliance on models for reliance on data and experiment, substituting process ("skills") for content knowledge, and adopting the professional assumptions of "Science, Technology, and Society" (STS), a field which conceives of science as an exercise of power rather than a search for truth. Above all, the NGSS's politicization is the consequence of their commitment to diversity and equity. Diversity and equity justify incorporating the modern diversity cant into science education, substituting process knowledge, remedial communication skills, identity-politics hagiography, and political activism for actual content knowledge. Diversity and equity also justify diverting money from science education to an apparatus of remedial teachers and a penumbra of administrators and activists. The NGSS's commitment to diversity and equity is the single greatest contributor to their abandonment of adequate science standards." *I say: Amen to that!*

- 4 This <u>research</u> accurately states: "The *Framework* and *NGSS* seek to imbue students with particular **political** views regarding climate change, sustainability, renewable energy, and other environmental matters. They fail to present these controversial issues objectively. For example, *NGSS* focuses on the negative effects of human interactions with the environment, while downplaying activities that show responsible stewardship of the Earth. *NGSS* also promotes the view that manmade greenhouse gas emissions are a major contributor to global warming. This (like other aspects of climate change) is debatable, but *NGSS* coverage of the issue lacks the needed balance. **The promotion of particular political opinions and positions should not play a role in science education**."
- 5 One should ask, WHY did the *Framework/NGSS* deem it necessary to scrap the Scientific Method after it has been successfully used for some 4000 years? The likely answer is rooted in politics. When asked to support their climate alarmism (renewable energy endorsements, etc.) *via* the Scientific Method, they were unable to. That left two choices: **a**) change their agenda, or **b**) get rid of the Scientific Method. The *Framework/NGSS* provided the perfect opportunity to quietly (without public debate) do the latter.
- 6 The matter of Critical Thinking is even more subtle. On the surface, the *Framework/NGSS* appear to support Critical Thinking but that is a ruse. Their actions belie their words. The clear message to K-12 students is to conform to what is **politically** in favor (e.g. climate change, equity, COVID vaccinations, etc.). The greatest fear of the Left is to have Critically Thinking citizens, so the *Framework/NGSS* are doing their best to make sure that does **not** happen in the US and so far they have been successful. One of many examples is that the Woke mentality that they are fostering <u>disdains discussion and debate</u>. That is antithetical to Critical Thinking
- 7 For more reports and commentaries about the politics of the *Framework/NGSS*, see <u>Appendix T</u>, which is just a *sampling* of the cross-section of complaints.

So the evidence that the *Framework/NGSS* are infused with political messages is overwhelming. My pointing *some* of them out, and objecting to these, is **not** me politicizing the issue!

The answer to those who don't like to see Science embedded with political agendas, is for them to write to the authors of the *Framework* and *NGSS*, and strenuously object to their politicization. *Let me know how that goes*! When those documents have been scrubbed of political messages, I will gladly eliminate any mention of politics in this Report.

[Note: The next Appendix discusses in more detail a specific political issue injected into the K-12 Science standards by the *Framework*: **Equity**.]

Appendix L: Equality *vs* **Equity**

Due to the *Framework* and *NGSS*, current US K-12 Science education is now infused with a great emphasis on **equity**. What's the difference between **equality** and **equity**?

The sound-bite definitions of these two similar appearing words are: **1**) *Equality* is about providing **equal opportunity**, while **2**) *Equity* is about assuring **equal results**. In other words, those similar-appearing terms are actually almost the *opposite* of each other.

Interestingly, although it is not frequently acknowledged, whether we advocate *equality* or *equity* is largely a **theological** issue. Which one is "right" is characterized as a moral (hence theological) question.

America was founded on democratic principles and Judeo-Christian values — and both of those are about **equality**. Consider our <u>Declaration of Independence</u>. Among other inspiring things it has this sentence, which incorporates both of these values:

"We hold these Truths to be self-evident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness..."

The Bible says nothing about us being entitled to equal results (*equity*). On the contrary, there are numerous references to unequal results (e.g., going to hell) based on bad actions.

Furthermore, the Bible repeatedly encourages good people to reach out and help the poor and disadvantaged. The story of the <u>Good Samaritan</u> is a classic example. The distinction between what the Bible is advocating and the current political (equity) movement, is that the Bible is praising *voluntary* assistance to the disadvantaged — while today it is being made more and more *mandatory*. **Big difference!**

Advocates of equity insist that those with disadvantages should have *mandated* commensurate compensation. But since this is not a Biblical position, where is this theological standard enumerated, by whom, and with what authority? No answer.

What the Bible also says is that inequalities will be made up for *in the next world*. But those who do not ascribe to Judeo-Christian beliefs (or similar) have no assurance that there will be a next world, so they want adjustments *now*.

Another slippery slope is that once we say adjustments should be made for inequities, exactly what disadvantages should be compensated, and specifically who has the authority to make that determination?

- For example, I am the oldest of nine children, so I received much less parental guidance, etc. than a single child would have benefited from. Shouldn't that major deficiency be compensable in the name of equity?
- As the oldest of nine children, the role of being the third parent was forced on me. That severely restricted the time I had for developing my own interests, skills, etc. Shouldn't that significant inequity be compensable?
- My dad went bankrupt a few times, so we had to suffer many indignities like eating bread discarded from the day-old bread store. Shouldn't that be compensable?
- When I was still living at home (early twenties), our family home burned down. As a result, my life was severely disrupted, plus I lost innumerable mementos and other treasures. Shouldn't that be compensable?
- I've lost much of my hair, which has negatively impacted my opportunities with women. Shouldn't all those privileged men with a full head of hair, compensate me? Etc., etc.

The bottom line is that Life is not Fair! No law legislates fairness across the board, as no such thing is possible. God is the only authority who has the power and the interest to guarantee us total fairness.

However, those who deny the existence of God are then left to their own means to try to force fairness on an unfair world — which is what we are dealing with now.

This secular justice is packaged in attractive ways. Consider one of the all-time most popular songs, <u>Imagine</u> (1971). This a <u>wonderful melody</u> — but what about the words?

Like a lot of things from the Left, a very problematic message is communicated in an attractive package. Their idea is that if we enjoy the song, we won't pay attention to the message it conveys. Would it be as popular if it was titled the *Ode to Equity*?

Let's look more closely at the subversive messages John Lennon clearly states...

Imagine there's no heaven, it's easy if you try. No hell below us, above us only sky. Imagine all the people, living for today, ah ha.

Imagine there's no countries, it isn't hard to do. Nothing to kill or die for, and no religion too. Imagine all the people, living life in peace, yoo-hoo...

You may say I'm a dreamer, but I'm not the only one. I hope someday you'll join us, and the world will be as one. Imagine no possessions, I wonder if you can. No need for greed or hunger, a brotherhood of man. Imagine all the people, sharing all the world, yoo-hoo...

You may say I'm a dreamer, but I'm not the only one. I hope someday you'll join us, and the world will live as one.

He is advocating no religion (no God), globalism (no borders), no possessions, etc. Interestingly — and accurately — Lennon <u>publicly acknowledged</u> the obvious: that the words are "virtually a Communist Manifesto"! The takeaway:

Equality => a Judeo-Christian, democratic country (e.g., America) Equity => an atheistic, communist country (e.g., China)

The counterargument is something like: "America is a fraud — just look at all of the historical failings. The victims of these injustices deserve reparations."

The answer is: yes, there have been innumerable mistakes made. This is an indictment of the failings of humans, not Judeo-Christianity, or democracy, or America.

The solution is: not to change horses in midstream, or go from the frying pan to the fire (e.g., a democratic country to a communist country).

Instead, focus on complying better with our Judeo-Christian values and democratic beliefs. Then have faith that God will be the great equalizer for all the injustices that we will inevitably experience in this vale of tears.

For further examples of the Left's attack on things like "whiteness" see <u>here</u>. Critical thinking, the Scientific Method, linear thinking, Judeo-Christian values, the nuclear family, hard work, decision-making, respect for authority, etc. are all denigrated...

Give careful thought to the <u>DEI</u> (Diversity, Equity, and Inclusion), <u>CRT</u> (Critical Race Theory), <u>SEL</u> (Social-Emotional Learning), and <u>Woke</u> packages, as they have profoundly **negative** societal consequences. For some excellent commentaries on these in K-12, please read this powerful *Heritage* <u>document</u>.

Before we can respond to a threat, we need to accurately understand it. Here is a powerful, comprehensive, discussion of <u>Woke</u>, and exactly what it is all about. Do we really want <u>Marxism</u> to be what our children are taught?

Lastly, although this short Jordan Peterson <u>video</u> mentions higher-ed, every bit of it applies to K-12 and to the *Framework* and *NGSS*. Note that the video was published in 2018...

Appendix M: The Social Emotional Learning (SEL) Disaster

The Left is masterful at word manipulation. They have the skill, experience, and interest to massage the vocabulary to make a horrifically bad idea sound appealing. (Think "Green New Deal.") However, the success of their deception depends on one other ingredient: **the lack of Critical Thinking by the public**.

A case in point is something going on in the education field called **Social Emotional Learning** (SEL). If you do an Internet search, 95% of what you'll find is pablum saying what a wonderful idea SEL is, like <u>here</u>. It gushes:

"Social-emotional learning is the process of developing the self-awareness, self-control, and interpersonal skills that are vital for school, work, and life success."

What's not to like? The Left is saying: Just agree and then move on. Nothing to see here.

Critical Thinkers will be wary of *anything* that is endorsed by our educational cabal (or the media), and will not blindly accept their description of such "programs." Persistent parties will find objective and accurate descriptions of what SEL is *really* all about — e.g., this <u>study</u> says:

"Proponents of SEL call for focusing less on academic content and knowledge in schools, and more on student attributes, mindsets, values, and behaviors."

Think carefully about that *profoundly* significant statement. This is a movement to *devalue* **academic content** and **knowledge!** Does that sound like what our education system should be doing? Who benefits from US students being less educated? Certainly not the students, their future employers, or our country.

To compensate for less knowledge, the SEL movement fills our children's heads with **attributes**, **mindsets**, **values**, and **behaviors**. Does that sound like what our education system should be doing? Isn't it the parents' job to be teaching those things?

If Critical Thinkers doggedly forge further in their SEL Internet search (separating the wheat from the chaff with a machete), they will come across this marvelous <u>Report</u>, published by <u>Moms for Liberty</u>. Among many worthwhile observations, it says:

"The ultimate goal of SEL is to shift the values, beliefs, attitudes, and worldviews of students. The goal is to psychologically manipulate students to accept the progressive ideology that supports gender fluidity, sexual preference exploration, and systemic oppression."

Getting the idea here? Go back and read the initial supportive quote above, and see how accurately and honestly it was describing SEL:

"Social-emotional learning is the process of developing the self-awareness, self-control, and interpersonal skills that are vital for school, work, and life success."

The advertised goals of **SEL** sound great! Who could be against the <u>Stated Objectives</u> of helping children to: **a)** Make better decisions, **b)** Set goals, **c)** Gain confidence, **d)** Collaborate with others in work and play, *and* **e)** Navigate the world more effectively? After all, the SEL promoters cite studies that say that these are good things! DUH...

For any such program, there are two obvious questions: **WHAT**? and **HOW**? In other words **WHAT** are the entire *objectives* that will be conveyed to our children, *and* specifically HOW will they be taught (i.e. *methodology*)?

There appear to be three main SEL packages, and the answer to each of these questions is quite different:

SEL OPTIONS		
Version	Objectives	Methodology
SEL 1.0	Stated + Unstated	Atheism
SEL 2.0	Stated	Judeo- Christianity
SEL 3.0	Stated	Critical Thinking

The promoters of SEL 1.0 do **not** advertise their *Unstated* Objectives, and they certainly do not compare the results of alternative approaches to achieving the Stated Objectives! Let's do a **brief** overview of each, and see what the takeaway is...

SEL 1.0

This is the initial version and the most common one in use today. This is what is heavily marketed by CASEL, Second Step, etc.

OBJECTIVES are both the Stated Objectives, *plus several* **Unstated Objectives**. The Unstated Objectives include major elements of progressive ideology — e.g., *DEI* (Diversity, Equity, and Inclusion), *CRT* (Critical Race Theory), and *Woke*. Decoding the Language Game of Social Emotional Learning says it well. In this powerful talk, this PhD connects SEL 1.0 with **Marxism**.

METHODOLOGY of SEL 1.0 is **atheism**, **secularism**, and **relativism**. These are man-made (as <u>vs</u> God-made) standards, which are embedded in Marxism and communism. For more details, see these good explanations: here, here, and here.

Part of SEL 1.0 **methodology** is "**group consciousness**" (as compared to "individualism"). As stated here "SEL 1.0 exercises are constructed to maximize group awareness, group decision-making, and group activities. The peer pressure for conformity to the group becomes irresistible." Marxism/communism are about groups, while America is about *individual* rights.

Another **methodology** example is that SEL 1.0 works to *diminish* the importance of **thinking** and understanding. Consider this statement from SEL advocates: "As a species, **emotion is more important than understanding** because, instead of our willful rationality and effortful pursuit of universal truths, we are 'wired' for emotion and it drives us forward..." Got that? *Emotion and Feelings trump Knowledge and Thinking*!

One more methodology concern with SEL 1.0 is that it is strongly based on moral relativism. Essentially this means that there are no absolute truths (e.g., God, Ten Commandments, etc.) as truth is relative to every individual. This is an important basis for progressive ideology, and has been rightly called "The Worst Idea Ever."

What public school system would say to parents: "We are going to downplay teaching your children Critical Thinking, knowledge, traditional values, etc., and instead instill in them Marxist ideology?" *But that is what SEL 1.0 is!* See more about this here.

Note: SEL 1.0 may violate the *Education Parental Rights* laws of some states. For example, North Carolina's version gives parents the exclusive right "To direct the upbringing and moral or religious training" of their child (see § 114A-10, [2]). SEL 1.0 is likely legally in conflict with that, as SEL 1.0 provides moral training that is not only not fully disclosed, but is certainly not under the direction of parents.

SEL 2.0

There are other options than SEL 1.0! For example, the admirable Stated Objectives can be met by adherence to traditional and common US standards: **Judeo-Christian values.** Some examples of sources for SEL 2.0 are here and here.

OBJECTIVES are just the Stated Objectives. There are no hidden objectives.

METHODOLOGY is via **Judeo-Christianity.** Consider that each of the five Stated Objectives would be accomplished by close adherence to the Bible.

The best part is that this methodology would **not** have any of the major downsides of SEL 1.0. For example, our children would not be a faceless part of a Pied-Piper-led group. As stated here: "Christian training encourages kids to conform to what is right, and to avoid and oppose what is wrong. They are not to go along with the world." **Further**, SEL 2.0 would not be pushing DEI, CRT, Woke, or Marxism.

The fly in the ointment is that teaching Judeo-Christian values in public schools has been attacked by atheistic activists, under the guise of "separation of church and state." What they don't acknowledge is that **atheism is a religion**, **secularism is a religion** and **relativism is a religion**, so why don't the same rules apply? They do, but we're waiting for a lawsuit to make it happen.

Note: SEL 2.0 may also violate the *Education Parental Rights* laws of some states. For example, SEL 2.0 may be in conflict with North Carolina's law, as SEL 2.0 provides moral training that may not be considered to be "under the direction of parents."

SEL 3.0

In the meantime, there is a creative solution to accomplish the Stated Objectives that avoids the religion minefields: **properly teaching Critical Thinking**. A good discussion of this is here. Also see this study that verifies this as a legitimate SEL methodology.

OBJECTIVES are just the Stated Objectives. Again, there are no hidden objectives.

METHODOLOGY is to teach children to use and enjoy Critical Thinking. Amazingly, that will bring about **every one of the five Stated Objectives!**

Let's take an example: **Make better decisions**. We all make thousands of decisions, big and small. It's in our best interest — and (in most cases) society's best interest — if we use Critical Thinking for these. For example, students should Critically Think about managing their time effectively (e.g., for homework). Doing that would directly benefit them, as well as our society.

Considering the power of Critical Thinking, SEL 1.0 would certainly be promoting it, right? **NO!** They are advocating **feelings** *over* **intellect**, group conformity *over* individualism, etc. Look at their websites for "Critical Thinking" and it's only mentioned in passing. SEL 1.0 proponents are *opposed* to Critical Thinking as **Critical Thinking and group conformity are at odds.**

How does Critical Thinking fit in with SEL 2.0? Since the term "Critical Thinking" did not come about for centuries after the Bible was written, you won't find it there. However, the messages in the Bible are entirely consistent with Critical Thinking. (Here is a good discussion about that.) Since those who believe in God are faced with the challenges of atheism, secularism, relativism, etc., etc., if they are **not** Critical Thinkers, they will likely become easy prey.

The bottom line is that SEL 3.0 is the most practical and least problematic way to bring about the initial five Stated Objectives, in US Public Schools. (In Catholic Schools a combination of SEL 2.0 and SEL 3.0 would be ideal.)

Note: SEL 3.0 will **not** likely violate *Education Parental Rights* state laws, as there is no religion involved in using the Critical Thinking approach.

There is one caveat though to SEL 3.0! The Left has been aggressive in perverting everyday terminology to suit their political agendas. Be on the lookout for them to distort the concept of **Critical Thinking** as well. However, if you are a true Critical Thinker you will not be fooled.

What SEL should stand for is something like "Satanically Evil Learning."

Whether you are a parent, or a citizen without children in the school system, fixing SEL 1.0 is **extraordinarily** important. Literally, America's future is in the balance. Get informed. Speak up. Contact your State Board of Education, as they have control of this.

FYI, if you relate to videos, here is an <u>excellent one</u> that explains the significance of this contagious SEL 1.0 pandemic. Not surprisingly, Critical Thinking is the vaccine.

Appendix N: NGSS and Religion

We are all aware that the <u>US Constitution</u> forbids the government from espousing any religion.

But here is a million-dollar question: *is Atheism a religion?* There are strong arguments that support the contention that it is (e.g., see <u>this</u>).

Why this is relevant here is that the NGSS consistently promotes an *exclusively* atheistic view (i.e., that there is no God involved), on such issues as the origin of the universe and evolution. This should be no surprise as it says <u>here</u>: "Today science is practiced as an atheistic discipline – and largely by atheists."

A Scientific Analysis (see <u>Appendix D</u>) consists of four (4) essential ingredients. It must be: **1)** Objective, **2)** Comprehensive, **3)** Transparent, and **4)** Empirical.

In other words, a genuine Scientific Analysis of issues like the origin of the universe and evolution, must (as a minimum) be **Comprehensively Objective**.

That means that only presenting *one possibility* (e.g., the Big Bang hypothesis) as THE explanation of the origin of the universe, fails the test of it being scientific, as there is not even a rudimentary effort at being *comprehensive*.

When one and only one option is presented for several issues like this — and they all happen to be atheistic (i.e., the view that there is no God involved) — that amounts to the promotion of the no-God religion. We advocate for comprehensive objectivity.

Closely connected to this is <u>Relativism</u>. Relativism is the philosophical (and religious) position that all points of view are equally valid, and that all truth is relative to the individual. <u>This</u> is an interesting commentary that argues that there **are** absolute truths.

This postmodern belief also contends that truth claims are instruments of power and control. This leads to such positions as **equity**, found in the NGSS (see <u>Appendix L</u>).

Some sample references on religion and the NGSS:

- <u>Report</u>: Dangers of the Next Generation Science Standards. (2023)
- Atheism is the only religion tolerated by NGSS: Part 1 and Part 2 (2015)
- NGSS embraces materialism and the religion of Secular Humanism (2013)
- Atheism, Darwinism, and Environmentalism in a Lab Coat: NGSS (2013)
- <u>Kansas Families Sue to Stop NGSS</u> (on religious grounds) (2013)
- Battle Between Religious Freedom and Post-Modern Moral Relativism (2023)
- <u>Relativism: The Religion of Contemporary Culture</u> (2022)

Appendix O: NGSS and Common Core

<u>Common Core State Standards</u> (CCSS) was a major revolution to the US Education system, and the <u>Next Generation Science Standards</u> (NGSS) is another. The question is: are there important connections between these two education reforms?

At first glance, the answer is NO, as they cover different subject areas, and started at different times (2009 *vs* 2013). CCSS are standards for **English** and **Math**, while NGSS are standards for **Science**. There are several commentaries about the history of CCSS (e.g., <u>here</u>, <u>here</u>, and <u>here</u>), as well as for NGSS (e.g., <u>here</u>, <u>here</u>, and <u>here</u>). It's interesting to see that this <u>NGSS history</u> seems aimed at avoiding some of the major issues with the introduction of Common Core.

My assessment is that the correct answer seems to be YES. For example, there are similarities in the histories. For example, the promoters of both claim that they are state-led initiatives — but in neither case does that seem to be true (e.g., see <u>here</u>). For example, both efforts are effectively about nationalizing subject standards.

MOST importantly, both were based on a non-traditional mentality about how to best educate our children. The simplified argument was: that having skills was far more important than remembering (memorizing) facts. This <u>commentary</u> had some fascinating observations. After acknowledging that test results went down post-CCST, it says:

All of these tests attempt to measure higher-order thinking skills as they relate to abstract scenarios, nothing more or less...they assess students' Critical Thinking (the ability to analyze), problem-solving, and knowledge application...Higher-order thinking is not raw intelligence, but more a habit of mind, and the children who practice it more can generally do it better. Scores on all these tests, including the IQ test, will change based on the person's habits... If scores fall, this then indicates the problem lies in children's changing habits (not changing demographics), which directly relates to their schooling...

All states across the country adopted Common Core's approach in some way. This was because its writers promised their product would finally solve the problem of chronic mediocre academic performance, particularly with students of a lower socioeconomic background. How would it do this?

It would take a shortcut to higher-order thinking by eliminating lower-order thinking.

Lower-order thinking mainly includes basic comprehension (literal-level understanding of texts or concepts) and rote memorization (internalizing concepts through repetition and drill). Common Core proponents <u>dismissed these skills as mindless busywork</u> that needed to go... What the Common Core writers did not seem to understand, however, was that **higher-order thinking requires lower-order thinking.** Students need to practice reading on a literal level before they look for deeper themes and arguments...

Students need to memorize and apply formulas in arithmetic before they can do more complex processes such as graphing and working out multiple-step solutions. And they need to know actual facts in science and social studies before they understand the theories and methods in these subjects. In short, **they need the content before they learn the skills**.

This is a powerful message. It is saying that while CCST & NGSS are claiming to promote Critical Thinking — their methodology is **contrary** to setting the stage for students to learn to do real Critical Thinking!

Then there is this insightful <u>critique</u> of Common Core Math (which applies to the NGSS): What CCST is supposed to bring to the table is a deeper understanding of mathematics, so that students recognize how mathematical thinking is part of thinking in general. While this is a worthwhile goal, common core radically misfires on several accounts.

First of all, Common Core tries to teach the concepts first, and to incorrectly aged students. Younger students love memorizing and systems. That is what their brains are geared for. They want to learn how to do things. It isn't that "why" questions aren't appropriate, but the fact is that the "why" questions are not the most important thing, and it isn't what they are best at learning.

Disasters in math education have always come from people interchanging the needs of adults with the needs of children... It is easier to ask *why* questions when you already understand the process. It is harder to even understand the question being asked when you haven't learned any process at all.

Second, educators often complain about the lack of engagement of parents. However, it is difficult to take this seriously when the education establishment goes out of its way to rewrite the curriculum in a way that bears no connection to how parents understand the curriculum. If educators want parent engagement, they must consider the ways that their curriculum impacts the ability of parents to engage.

This is another profoundly significant reality. It is saying that while CCST & NGSS strive for admirable objectives, their methodology is not age-appropriate.

The bottom line is that there are MAJOR similarities between CCST and NGSS, and the takeaway is that while both were well-intentioned, neither has been a meaningful success.

FYI, for those that are concerned about the federal government's role here, note this:

"The U.S. Department of Education is legally prohibited from exercising any influence or control over curriculum or instruction in the schools, so it could not contribute any funding to the expensive task of creating national standards."

Appendix P: Critically Thinking about a Clash of World Views

One of the key messages of a good education is to convey to students that other people have different views on many issues (from COVID to Climate, renewables to religion). So what does a student do: ignore this discrepancy? change their view? or discuss with the other person why they look at things differently? A proper education would encourage a civil discussion.

It's fascinating to see how good people can have diametrically opposite views about the same situation, especially when the facts are largely indisputable. *Why don't the facts determine their response?* Because the facts are irrelevant to people with certain worldviews.

Note: by the "facts" we mean an **objective** assessment of the **totality** of the evidence — not just a selective one-sided story. FYI, this is consistent with a genuine <u>Scientific Analysis</u>, which has four critical elements: **1**) Objective, **2**) Comprehensive, **3**) Transparent, and **4**) Empirical.

Here is a popular worldview held by many well-intentioned people:

- 1 They instinctively give deference to perceived authority (CDC, AMA, IPCC, Dr. Fauci, etc.), as such acquiescence is believed to be a virtue.*
- 2 Due to #1, the information provided to the public by these authority figures is accepted carte-blanche taken at face value.
- 3 Also due to #1, they are willing to tolerate/overlook a surprisingly large amount of abuse, neglect, dishonesty, incompetence, etc. from such authority figures.
- 4 They have an automatically negative response to others who have the temerity to object to bad behavior by authority figures. They believe that such objectors must be malcontents, trouble-makers, disrespectful, etc.

Note that the **FACTS** have little influence on any of the positions of people with this outlook. Unfortunately, this perspective invites abuse by bad actors who are driven to gain increasingly more control over others, especially those who are deferential to their power grab.

Here is a very different (competing) worldview held by other decent people:

- **1** They believe that respect is not an entitlement or an endowment, but has to be earned.
- 2 The information provided to the public by these authority figures is treated skeptically which is the scientific way of processing data.
- 3 They are not willing to tolerate or overlook mistreatment by authority figures, as it is an immoral violation of their civil rights.
- **4** They are genuinely concerned when other citizens report they have been abused by authority figures, and base their response on the evidence.

In this second scenario, FACTS play a much more important role. To these people, doing what's right isn't robotically following directives by an authority figure, but rather using our Critical Thinking skills to make sound judgments.

Having a solid education of real Science will be helpful for anyone for reasons mentioned before in <u>Appendix I</u>, but in this case, particularly for those in the second group.

So the bottom line is that good people can have opposite reactions to the same situation.

Without understanding their different worldviews, this disparity can be hard to process. Additionally, if we want to convince a friend to take action about something, it would be helpful to have a clear understanding of their worldview before you structure your case...

* WHY this is the case in the US is an interesting matter that could be a lengthy discussion. It is partly due because Americans are trusting people; partly due to people instinctively tending to follow the crowd; partly due to current societal matters (e.g. climate change) being too complex for the average citizen to process; partly due to people having full lives already so they are glad to hand off the responsibility of getting involved with societal matters to someone else, etc., etc.

Some other worthwhile insights on this topic:

Bonhoeffer's Theory of Stupidity (short video)
Have You Heard the Buffalo Paradox? (short video)
How an Entire Population Becomes MENTALLY ILL (short video)
Are You a Good German or a Badass German?
A Primer for the Propagandized: Fear Is the Mind-Killer
Mass Formation Psychosis (Dr. Malone)
United States of Fear: How America Fell Victim to a Mass Delusional Psychosis (book)
Climate Hysteria: A Mass Delusion to Demonize CO2

Appendix Q: In Defense of Red Ink in Our Schools

{This commentary was primarily authored by family psychologist John Rosemond, who advises parents from a biblical worldview that has no room for psychology. In his younger days, John sang lead in a rock 'n' roll band. His websites are <u>parentguru.com</u> and <u>johnrosemond.com</u>.}

I will wager that the typical reader of this report does not know that between 2000 and 2019, inclusive, the pupil population of America's public schools increased by **7.6** %, the number of teachers increased by **8.6** %, and the number of district administrators increased by **87.6** %. I'll re-do that last figure alphabetically so you'll know it's not a typo: **eighty-seven-point-six percent**! That is an **eleven-fold increase** over the increase in students and a **ten-fold increase** over the increase in teachers, whose numbers grew commensurate with the uptick in pupil population (as they should).

In other words, most, by far, of a school system's per-pupil expenditures are not going into the classroom. Instead, they are supporting administrative positions that parochial and other private schools largely do without and yet manage, overall, to remain up and running and provide an education that is comparable if not superior to public education.

Public school administration is a money pit. When do public schools have enough administrators? When a private school head is asked, "Do you have enough administrators?" the answer is either "yes" or "no, but we manage." The mere fact that a private school stays open means they have satisfied their administrative requirements. An administrative enlargement of 87.6 percent over twenty years means public schools *never* satisfy their perpetual hunger for money, most of which goes into positions that have been invented for no rational reason having to do with teaching the ABCs.

What do these administrators do, anyway? By and large, they have nothing to do with teaching children to read, write, do basic math, or critically think. Many if not most of them deal with postmodern philosophical issues like making sure children who identify as biological absurdities of one kind or another do not suffer discrimination. Many of the administrators in question ensure that the systems they oversee are compliant with the many rules and regulations generated at the US Department of Education in Washington, DC, where toil (if that's the word) some of the worst decision-makers on the planet.

The glaring disparity between the slight uptick in students and classroom teachers, and the inexplicable increase in administrators, has failed to slow the fifty-plus-year downturn in student achievement. This began a few decades ago when America's education elite decided that schools were an ideal petri dish for cultivating and spreading a Leftist/socialist worldview.

I am a member of the last generation of American children who attended neighborhood schools that focused almost exclusively on teaching academics. It is significant to note that our teachers used a good amount of red ink. We could be wrong, and when we were, the punches were not pulled and the red ink spilled. Yet, our mental health, even when adjusted for reporting error, is estimated to have been ten times better than the mental health of today's kids, whose teachers have been told that above all else, they are to protect student selfesteem and to facilitate talk about feelings.

Embarrassingly, 65% of our fourth-grade students read below proficiency. Worse, 66% of eighth-grade public school students in the USA read below the level of proficiency, which means that nothing much of value is taking place between fourth and eighth grade in the typical public school.

Even more disconcerting is that the number of our high school graduates who have the ability and interest in Critical Thinking, is dropping precipitously. This inverse correlation with the rise in administrators is not a fluke, but an expected result. The primary message to our students today is to lemming-like follow whatever is politically in vogue.

Bottom line: Public schools don't need more administrators — they need more red ink.

Appendix R: States' Department of Education Mission Statement

I thought that it would be an interesting exercise to compare the mission (or vision) statements of each state's Department of Education (or Board of Education). Since they are all in the same business, it would seem that there should be uniformity in their goals. I was also interested to see how many states prioritized Critical Thinking. Here is a sample of what was found (arranged alphabetically):

- <u>Arizona</u>: "Our commitment is to support programmatic excellence so that Arizona's English learner and Migrant students are prepared for high academic achievement and college and career success."
- <u>Arkansas</u>: "Provide leadership, support, and service to schools, districts, and communities so every student graduates prepared for college, career, and community engagement."
- <u>California</u>: "Create strong, effective schools that provide a wholesome learning environment through incentives that cause a high standard of student accomplishment as measured by a valid, reliable accountability system."
- <u>Connecticut</u>: "A foundation in scientific literacy prepares students to be confident and capable lifelong learners who are equipped with the skills needed to access, understand, evaluate and apply information in various contexts.."
- Georgia: "Offering a Holistic Education to each and every child in our state."
- <u>Idaho</u>: "...we all work together and are committed to helping students achieve academic success."
- <u>Iowa</u>: "Iowa learners experience high levels of success and develop the capacity to continually grow as successful, healthy, and productive citizens in a global community."
- <u>Ohio</u>: "Each child is challenged to discover and learn, prepared to pursue a fulfilling post-high school path and empowered to become a resilient, lifelong learner who contributes to society."
- Maine: "Maine's schools are hubs of innovative teaching and learning that support, engage, and prepare all students to thrive. By exploring multiple pathways and real-life, projectbased experiences that spark an interest and curiosity in the world around them, Maine's students are developing the Critical Thinking, problem-solving, and relationship-building skills they need to succeed in work, college, life, and as citizens of our great state."
- <u>Massachusetts</u>: "To strengthen the Commonwealth's public education system so that every student is prepared to succeed in postsecondary education, compete in the global economy, and understand the rights and responsibilities of American citizens, and in so doing, to close all proficiency gaps.."
- Michigan: "Every learner in Michigan's public schools will have an inspiring, engaging, and caring learning environment that fosters creative and critical thinkers who believe in their ability to positively influence Michigan and the world beyond."

- <u>New Hampshire</u>: "The New Hampshire Department of Education advances learner-centered opportunities that create bright futures."
- <u>New York</u>: "Our mission is to raise the knowledge, skill, and opportunity of all the people in New York."
- North Carolina: "Every public school student in North Carolina will be empowered to accept academic challenges, prepared to pursue their chosen path after graduating high school, and encouraged to become lifelong learners with the capacity to engage in a globallycollaborative society."
- <u>Pennsylvania</u>: "Pennsylvania learners will be prepared for meaningful engagement in postsecondary education; in workforce training; in career pathways; and to be responsible, involved citizens."
- <u>Rhode Island</u>: "RIDE creates conditions for every student to think critically and collaboratively, and act as a creative, self-motivated, culturally and globally competent learner."
- South Carolina: Multiple skills are expected of a SC graduate, including Critical Thinking.
- <u>Tennessee</u>: "We are dedicated to the goal of dramatically improving student achievement, and committed to the belief that children from all backgrounds can succeed when given the opportunities they deserve.."
- <u>Texas</u>: "The Texas Education Agency will improve outcomes for all public school students in the state by providing leadership, guidance, and support to school systems."
- <u>Vermont</u>: "The Agency of Education implements state and federal laws, policies, regulations to ensure all Vermont learners have equitable access to high-quality learning opportunities."
- <u>Virginia</u>: "To develop policies and provide leadership that improve student achievement and prepare students to succeed in postsecondary education and the workplace, and to become engaged and enlightened citizens."
- <u>Wisconsin</u>: "Ensure that every child has access to quality public education programs, enrichment opportunities, and special education supports, so that all of our kids can be successful."
- West Virginia: "To provide effective and equitable access to high-quality learning opportunities to empower West Virginia students to Develop and demonstrate the **knowledge and skills** to maximize their intellectual and personal potentials; Encourage and promote a culture of responsibility, personal health, and social-emotional well-being to become engaged **community** members; and Anticipate and prepare for the future with a pathway to **workforce** readiness."

Some takeaways about these state Dept of Ed/Board of Ed mission/vision statements:

- 1 There was little uniformity
- 2 Many of the statements have nice-sounding, but unmeasurable goals.
- 3 Only a few statements mentioned Critical Thinking.

Appendix S: What Can You Do?

If you have carefully read through this Report on the US K-12 Science education situation, hopefully your response is: "What can I do about this profoundly important problem?" Some recommendations are:

1 - Get Educated. The more knowledgeable you are, the better armed you are to appreciate and counter the misinformation you will be given by those defending the system. They are not expecting you to be competent "in their field," so the more information you have, the more success you'll have. It's important that you not peruse but carefully study this Report.

"Our lives begin to end the day we become silent about things that matter... The hottest place in Hell is reserved for those who remain neutral in times of great conflict." — <u>Martin</u> <u>Luther King</u>

2 - Get Others Involved. There is strength in numbers. Share this four-part commentary with other like-minded parents, teachers, scientists, citizens, etc. Set up an email list, have meetings, and get organized. *United we stand, divided we fall.*

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." — <u>Margaret Meade</u>

3 - **Reach out to Sympathetic Organizations.** Even though (so far) no conservative organization has taken the lead in fixing the K-12 Science standards, some would be good candidates to do so. They need to hear from citizens that this is important to them. *Financially support organizations that are responsive on this issue.*

"A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty." — <u>Winston Churchill</u>

4 - Stay Focused. When dealing with the multiple problems with our education system, it's easy to get off track. The number one objective is to get schools to publicly commit to **teaching Critical Thinking as Job One**. The second objective is to ensure that Critical Thinking is being taught in K-12 Science classes.

"Concentrate all your thoughts upon the work at hand. The sun's rays do not burn until brought to a focus." — <u>Alexander Graham Bell</u>

5 - Assess Your Local School District. Ask some local Science teachers: "Is the traditional
 <u>Scientific Method</u> being taught?" [If no, then ask why not *and listen carefully*.]

Also ask some local Science teachers: "**Are you emphasizing Critical Thinking?**" [They are likely to say "Yes," so follow up with: "So on important matters like climate change you are **thoroughly** and **objectively** discussing *both* sides of that issue?

And on things like CO2, you are **thoroughly** and **objectively** discussing both the *benefits* and *liabilities*? ... And on things like fossil fuels, you are **thoroughly** and **objectively** discussing all the *pros* and the *cons*?]

Listen carefully to their answers and you will see whether or not they are actually teaching Critical Thinking, or only giving it lip service.

"Courage is contagious. When a brave man takes a stand, the spines of others are often stiffened." — <u>Billy Graham</u>

6 - If Your Child is in a Problematic School District. Check into a Catholic or private school, as their curriculum might be better. Don't just assume that though: ask their teachers the same questions. If that isn't a solution, then homeschooling would be another alternative to consider. That is not an easy option, so careful thought needs to be given to all of its implications.

"Energy and persistence conquer all things." — <u>Benjamin Franklin</u>

7 - Look into Your State's K-12 Science Standards. Your state's Board of Education can be more *politically* than *educationally* oriented. They rarely hear from citizens, so a group of informed citizens approaching them would get their attention. <u>Chapter 2</u> outlines eight (8) major issues found in many state K-12 Science Standards. Find out how many exist in your state, and politely (but firmly) object to your State Board of Education members, about any that do.

If your state Board of Education does not give you a definite commitment to fix any identified problems, then they are likely testing your resolve. You need to up the ante by writing pointed op-eds, educating more citizens, aligning yourself with sympathetic organizations, suing them, etc. Of course, referencing material like this Report is essential.

"It is hard to imagine a more dangerous way of making decisions than by putting them in the hands of people who pay no price for being wrong." — <u>Thomas Sowell</u>

8 - Speak to Your State Legislators. State Legislators have oversight of the Board of Education and your state's education system. If your state Board of Education is not responsive, then sympathetic state legislators need to be personally met with, and a strong case made that they need to step up.

"It is fascinating to watch legislators turn away from their usual corporate grips when they hear the growing thunder of the people." — <u>Ralph Nader</u>

We desperately need parents, teachers, scientists, citizens, conservative organizations, and any remaining pro-American media to focus on *what our children are being taught*, particularly in the subject areas of Science and History. Without doing that quickly, the likelihood is remote that America will be as we know it when the next generation comes along.

Forewarned is forearmed!

Appendix T: Some Critical Framework or NGSS Commentaries

These are some relevant Studies, Reports, and articles by other parties on some aspect of the Framework and/or NGSS...

- <u>Report</u>: Dangers of the Next Generation Science Standards. (2023)
- Report: The Critical Classroom. (2022)
- <u>Report</u>: Climbing Down How the Next Generation Science Standards Diminish Scientific Literacy. (2021) [See accompanying <u>video discussion</u>.]
- <u>Report</u>: Science Betrayed The propaganda infecting K–12 science curricula, especially on the environment, won't go away. (2021)
- <u>Presentation</u>: First, Do No Harm States should get out of the K-12 standards-writing business. (2021)
- <u>Book</u>: Challenging Science Standards A Skeptical Critique of the Quest for Unity. Charles Ault (2015)
- <u>Report</u>: The *Fordham Institute* analyzed the K-12 Science standards of the NGSS, as well as
 of <u>every state</u>. [Note: The NGSS was only given a "C".] (2013)

Framework/NGSS Advancing a Progressive Political Agenda:

- <u>Climate Alarmism Posing as Science Education for Children</u> (2022)
- <u>7th Grade Science Should Not Include Climate Indoctrination</u> (2022)
- Environmental indoctrination in our schools (2019)
- Keep an eye on high school climate modeling (2017)
- <u>Common Core and K-12 Science Education</u> <u>Could This be a Start to Climate Youth?</u> (2014)
- Wyoming Continues Battle Over Science Standards (2014)
- <u>Citizens for Objective Public Education</u> take an official position and <u>Recommends Against the</u> <u>NGSS Science Standards</u> (2013)
- States Respond to NGSS Science Standards (2013)
- If you're troubled by Common Core, check out the controversial NGSS (2013)
- <u>Heather Mac Donald</u> states that these "standards are troubling in their embrace of the <u>nostrums of progressive pedagogy</u>." (2013)

Framework/NGSS and Religion:

- Atheism is the only religion tolerated by NGSS: Part 1 and Part 2 (2015)
- NGSS embraces materialism and the religion of Secular Humanism (2013)
- <u>Atheism, Darwinism, and Environmentalism in a Lab Coat: Next Generation Science</u> <u>Standards Coming to YOUR State Soon!</u> (2013)
- <u>Kansas Families Sue to Stop NGSS</u> (on religious grounds) (2013)

Other Framework/NGSS Content Complaints:

- <u>Common Core's Next Generation Science Standards! Where's the Debate?</u> (2017)
- <u>NGSS is Science Education Plague</u> (2015)
- <u>Kentucky Governor Overrides Legislature on NGSS</u> (2013)
- How best to integrate content and practices in science (2013)

Misc Framework/NGSS Objections:

- <u>Revising the NGSS</u> (2022)
- Boxed In: How the NGSS Impedes Science Teaching (2013)
- Exiting the National Standards Bandwagon (2012)
- <u>Five Criticisms of the Framework for K-12 Science Education</u> (2011)

"There is little criticism of the new *Framework* because it is not in the best interests of many science educators to upset or question such a prestigious group selected by one of the most significant science organizations, the *National Academy of Science*. There is little criticism because if you are a science education researcher it might have negative effects on future funding possibilities from government and non-government sources. If you are a science teacher, the culture of schools today does not support questioning of standards reform, or anything remotely connected to the *Common Core State Standards* movement." See <u>here</u>.

"The *Framework* and *NGSS* seek to imbue students with particular political views regarding climate change, sustainability, renewable energy, and other environmental matters. They fail to present these controversial issues objectively. For example, *NGSS* focuses on the negative effects of human interactions with the environment, while downplaying activities that show responsible stewardship of the Earth. *NGSS* also promotes the view that manmade greenhouse gas emissions are a major contributor to global warming. This (like other aspects of climate change) is debatable, but *NGSS* coverage of the issue lacks the needed balance. **The promotion of particular political opinions and positions should not play a role in science education**." From <u>here</u>.

Appendix U: Some Other References

Some further references on the NGSS...

NGSS Development Overview

NGSS is a joint effort between the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve

Achieve: Who We Are (Note: Achieve seems to be inactive as their site is way out of date.)

The Organization Named Achieve: Cradle of Common Core Cronyism

A short <u>video</u> promoting the *Framework* (2013)

Some further references on Critical Thinking...

<u>The Case for Critical Thinking: The COVID-19 Pandemic and an Urgent Call to Close the</u> Critical Thinking Gap in Education

Eight Instructional Strategies for Promoting Critical Thinking

The Best Resources on Teaching and Learning Critical Thinking in the Classroom

15 Logical Fallacies to Know, with Definitions and Examples

Syllogism

Book: <u>Brainwashing — The science of thought control</u>

Book: Mind Wars

Some further references on the Scientific Method...

The Scientific Method: A Guide to Finding Useful Knowledge

<u>The Scientific Method: Why science is a crucial process for human progress, not just</u> <u>another academic subject or belief</u>

Some further references on Common Core...

How Common Core And Screen Overdoses Are Ruining American Kids' Intelligence The Problems with the Common Core

Note that these all **attack** Critical Thinking, the Scientific Method, Judeo-Christian values, the nuclear family, hard work, etc...

White Culture; Some Aspects and Assumptions of Whiteness; Some Aspects and Assumptions of White Culture in the United States

How about thinking outside the box? Here are my suggested <u>new K-12 courses</u> that would result in better-educated high school graduates. And watch this short powerful <u>video</u>.

Here is my preliminary list of some good books about fixing the education system.

Appendix V: Report Updates

This Report is about a complex topic, so it stands to reason that there will be additions, modifications, etc. to keep it current and on target. Due to the length of the Report, I didn't want someone to have to search for where the recent changes have been made, so below is an outline of what changes were made with the most recent revisions... [Note the pages and Appendix numbers below refer to the **current** document, not the original.]

3-13-23: Page 4 — Added a new paragraph about Critical Thinking

- 3-14-23: Page 35 Added a new <u>Appendix O: NGSS and Common Core</u>
 - " : Page 48 Added a new <u>Appendix V: Report Updates</u>
- 3-15-23: Page 6 Added/modified a new primary NGSS flaw to the list
- 3-22-23: Page 15 Eliminated some duplicated text, etc. in <u>Appendix B: How Did This Fiasco</u> <u>Happen?</u>
- 3-23-23: Page 34 Some edits of Appendix N: NGSS and Religion
- 3-29-23: Pages 25 & 26 Added Appendix K: NGSS and Politics
- 4-18-23: Page 27 Added a short paragraph about Woke in Appendix L: Equity and Equality
- 4-26-23: Several Pages Corrected some text that was not black
- 4-28-23: Page 8 Edited a sentence for clarification in <u>Appendix A: Who Am I?</u>
- 5-14-23: Pages 22 & 23 Added a new <u>Appendix F: Does the NGSS Improve on the Scientific</u> <u>Method?</u>
- 5-15-23: Pages 17 & 18 Edited <u>Appendix H: Why is the Curriculum a Top Education Issue?</u>
- 5-16-23: Page 6 Added a new link
- 5-21-23: Page 6 Added Social Emotional Learning (SEL) to the list of concerns
- 6-1-23: Pages 30 & 31 Added a new <u>Appendix M: The Social Emotional Learning (SEL)</u> <u>Disaster</u>
- 6-23-23: Page 13 Edited the title of <u>Appendix C</u>
- 7-2-23: Pages 27-32 Reversed the order of Appendices L and M
- 7-18-23: Page 22 Reverse order of #1 and #2 in the Scientific Method
- 11-22-23: Page 32 & 33 Added two pages to Appendix M, the SEL writeup
- 1-7-24: Page 5 Added a major new link to the benefits of Critical Thinking
- 1-23-24: Page 47 Added two new references regarding the Scientific Method
- 2-10-24: Page 47 Added two new references regarding Critical Thinking
- 2-16-24: Page 6 Added two additional concerns to the list

If you have any additional recommendations or questions, please email John Droz at: "aaprjohn" at "northnet" dot "org".