For 15 years, I have been an educational theorist and practitioner. For over 10 years, I have been an international policy advisor consulting with secretaries in S. Korea, China, UAE, Qatar, Russia, India and events, based discovering how the subject fields are inter-related in education and in business, as a spectrum study of the commons and differences, that definition spells out, ‘STEAM.’ The Dec. 2018 Committee on STEM Education report, ‘Charting A Course for Success,’ stated, “Leaders in STEM education continue to broaden and deepen its scope and further transcend the fields of study beyond just a combination of the four disciplines to include the arts and humanities.” In the Article 1 Rules Committee Meeting youtu.be/2Y6MoUBJP5U, recently, civics was mentioned many times, as was presidential and governor’s powers.

The US Educational system sets many standards in education that many other nations follow. Increasingly, a number of educational groups that produce standards have received less financial support from governmental structures directly and indirectly. Cuts to educational professional development has caused a variety of issues, one is that the standards writing groups have been under more pressure to align with industry desires, like those supporting Common Core standards, and less on research related to domestic and global educational methods and content. When known areas of education and connections are left out, society and individuals become less able to develop. In cross-assessing the US standards from STEM and Fine Art this year, some disturbing issues were uncovered. In five pages, I can only offer some of most concern; The Next Generation Science Standards (NGSS) were revamped a few years ago, the
new edition does to not have chemistry included for K-12, this leaves it up to each state to decide if they will teach chemistry. From working with educators in all kinds of schools and inclusive of the ITEA standards editor, Dr. Dugger’s last interview, very few educators have time to readjust to new standards, let alone realize what might be missing and get permission to add it in. In the proposed budget, states would be held accountable for meeting the standards, but if the states teach the full spectrum of the subjects, then would not have adequate time to teach the shifting standards. The standards are primarily language-based rote knowledge for the most efficient way of administering standardized testing and not predominantly representative of the content knowledge of the fields, excepting English.

With global threats of health and environmental changes with economic and political factors, there are more immediate needs for research-based learning with integrity. Schools can be centers for community needs, as tangible and virtual program hubs to house equipment and programs available to tax payers at all learning levels. Social and civic groups can sponsor additional equipment, but a base level for all communities should be the desire of everyone. How can we as a nation succeed, if the majority of our children’s public educational programs are proposed to be labeled ‘disadvantaged’ under block funding. In proposing this, it seems potential kleptocracy corruption, peace agreement and anti-trust legal issues could be established?

The rates of children with special needs and school district’s accommodation costs directly and with lawsuits have continued to rise. This dilemma can be directly link to lack of health care funding, especially birth control and sex education, biologically and chemically. Social sex education can still be left up to parents to decide, but if our schools are going to create a functional society, then the governing bodies of educational systems can and should be held accountable for teaching the fundamental truths of the known subjects.
The research I conduct has been on discovering the common truths of teaching and learning, methodology and pedagogy, across the subjects and then as connected to research and development, business and society. The acronym STEAM was not manipulated or invented, it is based on research to map each of the subject areas to discover the overlaps and commons steamedu.com/research/. This work helps ‘break down the silos,’ a current colloquial term for connecting subject areas with interdisciplinary educating. The subjects of Science, Technology, Engineering and Mathematics (STEM) had been well mapped and reconfirmed by my iSTEM graduate cohort at VA Tech, under the direction of John Wells. During that time, I used similar methodologies to map the ‘outlying’ subjects. My bachelor’s of science was in clothing and textiles design and took liberal art courses, worked in international industry and owned local and virtual businesses. The goal of conducting a survey across the university, business and social organizational structures, was to discover the map of the liberal arts, a pyramid steamedu.com/pyramidhistory/. This research has shown that three primary sub-divisions of the arts are recognized most substantially across our nation and internationally; Social, Manual & Fine. Due to translations across languages, this was shortened to ‘arts’ as more encompassing than ‘art,’ which relates more directly to design and expressive mediums and processes. A similar misuse of a critical term in educational references is the use of the word ‘technology,’ this term has long included all tools and processes developed, and not only by humans. In US educational systems, the term is often used in place of ‘educational/instructional technology’ ET/IT or sometimes. As much of the current and proposed budget show a significant shift of funding for the ‘Arts’ and for ‘Technology,’ CTE, then, it is quite important that these terms be used accurately.
Recent developments seem to be grounds for a deeper investigation into the Department of Education’s plan, for which the president has proposed with his recommendation of a budget. Many relevant issues have been reported to the Dept of Justice Inspector General, DoE Office of the Inspector General & Office of Planning, Evaluation and Policy Development as well as aides from the offices of, VA Senator Warner, MA Senator Warren, VT Senator Sanders and VA Representative’s aides and council of VA Rep. Scott at the council of Ed & Labor and aide of my own district in VA, Rep. Griffith. There are also related policy and contractor issues of consequence with, VA, OH and GA DoE, ITEEA and the Children’s Engineering Council.

US DoE Employee, Patti Curtis, sent promotions and hosted a Jan 22nd life-broadcast meeting on the topic of STEAM education with a two-person panel. This meeting included reports on the findings of a two-year study commissioned by the Educational Policy offices on STEAM Education with the Arts Education Partnership (AEP.) This contract to an art-based group only, is concerning as it seems to leave out inputs from this important discussion from the other subjects in the standards-based spectrum including; the rest of the arts areas of social studies, languages and physical education, and relevant STEM fields. Patti has long term connections to ITEEA, from where she is familiar with my research. That group is currently reworking Technology & Engineering standards with questionable methodologies and content. 

https://edstream.ed.gov/webcast/Play/9243fb2144144203b977cae26a7a3f751d. Ms. Dell'Erba reported that the 'A' of STEAM in her reports stood for the fine and design arts and was not representative of a research-backed definition inclusive of the spectrum of the liberal arts, but was limited to a fraction of the field’s defined subject areas. During Q&A, a panel member, Andrew Watson, is asked if there is more research on STEAM Education. He says 'No.' This is not corrected. Unfortunately, these statements can be verified as not accurate by each of this
meeting’s main speakers with connections to me and/or my work prior to this meeting. Many other research studies, quite a few commissioned by other governments, have existed on this topic and none have discredited the research-backed definition. Biblio: 
steamedu.com/shop/biblio/. Since AEP represents 100 +/- arts groups, it is relevant to many national budgets to include that Mary Dell’Erba was sent links to my research by the US DoE meeting host prior to the meeting. Her and a staff-mate had a prior meeting with me where they acknowledged not including my definition or work, confirming they chose to not include the full spectrum subjects they were tasked with reporting on.

Andrew Watson, an employee of Alexandria City Schools in VA, talked on the panel about his work with Fairfax County Schools, VA, and a group he represents Innovation Collaborative, innovationcollaborative.org. He vaguely promoted research from another group’s work in STEAM in his presentation. The other group seemingly promoted, Project Lead the Way, (PLTW), with a sponsors including Chevron, has programs in public schools in all 50 states. Andrew has record of citing my research in a 2013 paper “Transitioning STEM to STEAM: Reformation of Engineering Education.” Requested presentation slides from Andrew’s part of the meeting were not sent, possibly breaking FOIA laws. The end-of-month DoE recap newsletter posted by Patti Curtis with a link to this meeting and no recognition of this discrepancy. I believe the meeting and its relationship to previous, current and proposed budgets, put this issue in a relevant situation for potential reviews for fraud of federal funds, libel issues and seemingly is linked to considerable grants, contracts, policy and related funding for educational entities and programs of national relevance and in all 50 states. Please help stand up for integrity in education and research as an important basis of knowledge and truth for every student and our global society.