



CAS 64<sup>TH</sup> ANNUAL MEMBERSHIP RECEPTION  
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## EXECUTIVE DIRECTOR'S REPORT By Dr. Karissa Niehoff

Welcome, congratulations to our honorees, and thank-you...from all of us at CAS. We exist to provide resources and support for educational leaders, but in truth we can't be an association of relevance and meaning without you- the people doing the work and informing the work. You bring the real, present life in schools to us; you bring us your voice; it is our job to share your voice and respond to your situations. We know what it means for you to plan to take time to serve on a committee or a board, then to actually be able to make the drive to Cheshire...thank-you...so very much!

In my report today, I will be sharing specific highlights and challenges for both the association and for education in general but first I would like us to consider things from a broader perspective. When we spend so much time in the present moment we can sometimes be more susceptible to immediate pressures and the "triage" of the work. When we take a step back we can regain perspective and recognize opportunities a little more clearly. We can place an individual moment in its place on the timeline of a movement.

There has been so much energy, anxiety and work around the concept of transforming schools so that they prepare our children for success in the 21<sup>st</sup> century. In fact, this might be the 21<sup>st</sup> year that we have been trying to nail down just what the 21<sup>st</sup> century skills are- as if a static list of skills would hold up in a global society that is changing every day. What we do know is that education and "schools" must be built and based on what we know about how learning happens, what it looks like, and what needs to be learned in this 21<sup>st</sup> century. And we know that there are proven best situations, practices, and approaches:

- Mastery based, personalized Learning
- Rigorous and Relevant Curriculum
- Multiple measures of assessment documenting growth over time toward standards
- Flexible Learning Environments- anytime anywhere learning
- Re-defining Educator Roles and Professional Development
- Meaningful Relationships between and among educators and students
- Home and Community Involvement
- Learning Environments that are welcoming, caring, respectful and safe

When we go down this list...I wonder...haven't those of us in education valued these concepts all along? That these are situations and practices that we have always believed in?

I suppose we can feel rightfully frustrated that it took crisis in the court of public opinion to raise the awareness that schools need varying degrees of redesign, and that the “culture of crisis” resulted in massive policy changes, many of which have been unrealistic and extremely burdensome...Remember 2012? But now, as the pendulum has started its shift back toward center, we as a society are now engaged in a more serious conversation not just about how schools need to be transformed, but also about how they need to be supported- supported through meaningful policy changes, provision of resources, and encouragement to be innovative. Good things are emerging out of this turbulence.

- Connecticut’s ESEA Waiver request was accepted last year- which includes a provision that school and district performance measures will be 50% growth over time, and 50% other assessment criteria like access to the arts and physical fitness.
- ESSA has brought governance and decision-making back to the state level. We are eagerly awaiting details of the implementation plan.
- Schools at all levels and community organizations and businesses are embracing partnerships...these are huge steps in support of learning opportunities that are student-centered, mastery-based, and career-oriented.
- We are looking at supports for students and families from a community perspective; we recognize that agencies must collaborate.

Again- these concepts are not new, but now their importance is glaring...and we hope that their importance does not diminish as we move into the future.

I’d like to share interesting insights from very influential thinkers outside of education; insights that underscore this point

You may have heard of the great thinker and author Will Durant (1885-1981) who was awarded the Pulitzer Prize (1968) and the Presidential Medal of Freedom (1977). He spent more than fifty years writing his critically acclaimed eleven-volume series, *The Story of Civilization*. He was a champion of human rights issues and his writing still educates and entertains readers around the world.

One of his last works- *Fallen Leaves: Last Words on Life, Love, War, and God*, which he worked on right up until his death at age 96, was published in 2014- found 32 years after his death in a granddaughter’s attic trunk.

There is a section of the book entitled “On Education” which he wrote at a time that our country was coming off of decades of emphasis on industry...post WWII, and was struggling with the societal issues of the 60’s and 70’s. In that section, he writes-

“We need more knowledge, and must submit to a heavy stress upon science in education and government, for we are subject to international challenges that force us to keep pace with every technological advance. But we need something more than knowledge: we need the wisdom and character to use our knowledge with foresight and caution, with both resolution and restraint.

Today our educators who once bravely led the way toward the scientific and technical emphasis in America’s schools are disturbed by the completeness of their victory, and stand in sorrow before their accomplished dream. They do not quite regret their efforts, or retract their aims; they know a modern nation must choose between industry and vassalage, to meet the competition of an industrializing world; these things are not matters of choice, for nations do not live in a vacuum of freedom or peace. But our conscious educators

perceive that, after generations of scholastic effort, they are failing to produce either educated men or gentlemen; that the lavish equipment of our schools has not availed to diminish political corruption, sexual irregularity, or violent crime; that certain virtues once prominent in our forbearers seem to have lost standing with a generation skilled beyond precedent in unmoral cleverness; and that the emphasis on science has brought no peace to the soul. These conditions are due rather to economic changes than to pedagogical carelessness; but the educator begins to wonder whether the schools have not surrendered too completely to the charms of the intellect and offered too mild a resistance to the forces of disorder and decay.”

Think about what Durant called the “charms of the intellect” vs. the concept of intelligence. Socrates thought that intelligence was the only real virtue; and that we must make sure to distinguish intelligence from intellect.

I think this is part of the terrific paradigm shift that education is making- moving from intellect to intelligence (remember Howard Gardner?)

Intellect is the capacity for acquiring and accumulating knowledge; whereas intelligence is the ability to use experience- even the experience of others- for the clarification of ideas and information, and ultimately the attainment of our goals. A person with great intellect may have a million ideas and yet be a criminal or simply a fool- brilliantly unsuccessful; but we would hardly find an intelligent person to be either character or unsuccessful.

One more sharing from Durant...he offers many recommendations throughout his writing- on every topic- but here is one that is interesting-

“To balance the commercialism and partiality of private broadcasting systems and news media, I would recommend the establishment of a US broadcasting company finance by the government but controlled by our universities.”

So as our efforts intensify to transform education, develop 21<sup>st</sup> century skills and redesign schools we must continually sharpen our lens on the future.

WHAT DOES THE FUTURE HOLD FOR OUR YOUNG PEOPLE?

I’ll bring another influential thinker “into the room”- Futurist Thomas Frey- He is from the DaVinci Institute...works with the “Board of Visionaries”...In the top .1% of intellectuals and is recognized worldwide as a leading Futurist.

While waiting in line at the airport he did some mental calculations about what he calls “massive waste of human capital”. 10 million man hours per year wasted on the multiple customs lines at this single airport.

He says that our systems are what control the flow of commerce, govern our effectiveness as members of society and create much of the stress we face on a daily basis. He says that we, as a society, are operating at somewhere between just 5-10% efficiency and that we will have to make many dramatic changes.

So what are examples of systems that are restricting our efficiency?

- Income Tax System- the mother of all boat anchors. The US Tax Code is about 64,000 pages in length

- Half-implemented metric system- we purchase cars with 3.2 liter engines and fill them with quarts of oil.
- Keyboards- the most frequently used keys are placed randomly across the keyboard
- Laws-With each city, county, state, federal agency, and taxing district able to issue their own regulations, mandates, etc., we don't even have a good estimate of how many laws are on the books.

The educational system also has its efficiency flaws. One of Frey's complaints about higher education is that they tend to prepare students for jobs of the past rather than the jobs they will be doing that haven't even been invented. "Shooting behind the duck".

Consider the exponential growth of global information as just one reason why systems need to change.

Our Total technological capacity-

A study done by the USC Annenberg School for Communication & Journalism released a few years ago:

- Researchers calculate that humankind is able to store at least 295 exabytes of information...that's a number followed by 20 zeroes!  
That's 315 times the number of grains of sand in the world. But it's still less than one percent of the information that is stored in all the DNA molecules of just a single human being.
- Buckminster Fuller created the "Knowledge Doubling Curve"; he noticed that until 1900 human knowledge doubled approximately every century. By the end of World War II knowledge was doubling every 25 years. Today things are not as simple as different types of knowledge have different rates of growth. For example, nanotechnology knowledge is doubling every two years and clinical knowledge every 18 months. But on average human knowledge is doubling every 13 months. According to IBM, the build out of the "internet of things" will lead to the doubling of knowledge every 12 hours.
- Size comparisons:  
A megabyte of information- a large novel- imagine it as a tiny ant.  
X 1000 is A gigabyte- human genome- is the height of a short person.  
X 1000 is A terabyte- annual world literature production- is the length of a harbor bridge  
X 1000 is A petabyte (10 to the 15<sup>th</sup> power)- All US research libraries- size of New Zealand  
X 1000 is An Exabyte- 2/3 annual production of information- diameter of the sun.
- As of January 2013, Facebook users had uploaded over 20 billion photos with 350 million new photos every day. For each uploaded photo Facebook generates and stores four images of different sizes, which translated to a total of 960 billion images and an estimated 357 petabytes of storage.

Here is something that is amazing- The Human Brain is estimated to be able to store memories equivalent to 2.5 petabytes of binary data...store them- not necessarily access them!

And according to Thomas Frey- our global knowledge base doubles every single day! We blame technology for eliminating jobs and forcing fast change but it is actually giving us capabilities beyond our wildest dreams.

Remember the hours of wasted time in the airport customs line? By the end of the decade 90% of those jobs will be automated out of existence. By 2030 over 2 billion jobs will disappear. 60% of the jobs that will exist 10 years from now haven't been invented yet!

## Thomas Frey's 14 New Hot Skills:

1. Transitionists
2. Expansionists- talent for adapting
3. Maximizers- ability to maximize processes, situations, and opportunities
4. Optimizers- skill and persistence to tweak variables until it produces better results.
5. Inflectionists- Finding critical inflection points in a system
6. Dismantlers- Every industry will eventually end; need to know how to scale things back in an orderly fashion
7. Feedback Loopers- Those who can devise the best feedback loops
8. Backlashers-Every new technology will have its detractors, and each backlash will require a response
9. Last Milers-Techonologies commonly reach a point of diminishing returns as they attempt to extend their full lcapacity to the end user.
10. Contextualists-In between the application and the big picture lays the operational context for every new technology
11. Ethicists- People who can ask the tough question anad standards to apply moral decency to some increasingly complex situations.
12. Philosophers- With companies in a constant battle over "my brain is bigger than your brain" it becomes the overarching philosophy that wins the day
13. Theorists- Every new product or service begins with a theory
14. Legacists- Those who are passionate and skilled with leaving a legacy

## Jobs of the Future:

Personal Rapid Transit Systems, Atmospheric Water Harvesters, Global Systems, Future Sports, Commercial Drone Industry, 3D printing, Big Data processes (waste, fraud,development), Augmented Reality, Alternative Financial Systems, Energy storage, Futuristic construction, Driverless everything, Future Agriculture, Micro-colleges (training immersion centers), Senior Living, Dismantling systems, Extreme Innovation (extinct revivalists- limb manufacturing)

Whether we choose to believe Thomas Frey's every prediction is not so important perhaps as just reframing our thinking about what schools need to be doing to prepare and guide our students into 21<sup>st</sup> century pathways.

## Now- let's step back to the more immediate- Connecticut and CAS-CIAC

CAS highlights- hopefully helping to support school leaders in this work:

- Efforts to reach ALL member schools, leaders and students- expanded our outreach and programs in the field
- Marie Glowski- from SDE leadership in ELL and Special Education. Executive Coaching with Sal and Pat- connection with Turnaround Office; supported establishment of CALAS

- Growing our work in areas of equity and social justice. Jenn Buckley and Dave Maloney in Student Activities to help grow leadership development programs for minority youth. “My Brothers Keeper”- Obama initiative. Relationship with Chris Temple “Salam Neighbor” and “Living on One Dollar”; work with ADL and citizen leaders to sponsor workshops about engaging Muslim students and families.
- Continued state level work in evaluation and calibration-Ev and Mike working on the Development Team.
- LEADERSHIP DEVELOPMENT- Tim runs the Principals Leadership Series, Summer Leadership Institute, Expansion of New Leaders Academies and UCAPP; numerous workshops
- State and National level work in early childhood- Regina and her board; NAESP leadership; state level leadership
- CCSS community of practice; middle level leadership-Earle
- CIAC- continues to be a national model for adherence to education-based athletics and activities. Our staff members are each held in high regard nationally for their areas of work. I serve on NFHS BODs...

Continue to be a respected member of coalitions and task forces. We are held in high regard by the Governor, the Legislature and our colleagues at the SDE, CAPSS, CABE...the Big Six; we chair the CT Coalition for Public Education. Recent efforts on SB 380... we were the strongest voice of practice and perspective. We are strong partners with CAPSS and CABE in educational transformation work, and with the Big Six in a two-year effort to develop a new model for funding education in Connecticut.

Going forward we intend to grow as a center for innovative practice by harnessing talent in the field and highlighting best practices. We are committed to engaging the schools and leaders we haven't met yet...just haven't met you yet...

And as we celebrate the retirements of Earle, Regina, and Sal, we are excited to welcome new staff members who bring fresh ideas and the energy to carry the great things on!

#### CHALLENGES...

There certainly is no challenge in the area of will, work ethic or warmth on the part of our staff. Our main challenge will be fiscal.

WE are all waiting for a state budget...hopefully Thursday...at this time all but seven communities in the state will be losing anticipated statutory formula grant dollars. Massive cuts across agencies and in municipalities...all of which will affect schools.

Within our organization we are finalizing a budget that offers no salary increases and as much tightening of expenses as possible without compromising quality of programming. There will be no increases in dues, fees, etc. for schools...

Unfortunately, if we do not receive SDE funds, many of our programs will be impacted. We will do what we can to keep programs and their respective staff members.

We will be presenting a budget in June for an electronic vote.

As I bring my remarks to a close- I would like to end with a more upbeat tone...was it SNL that had the skit "Positive Thoughts"?!

There is something we can think about and DO that requires no funding yet is invaluable. Something that matters most to us no matter what role we play- administrator, teacher, student, parent, community member. Something that is absolutely essential for cultivating a 21<sup>st</sup> century culture in our schools- and that is TRUST.

TRUST in others develops the three things that drive motivation- mastery, purpose and autonomy. TRUST in the process of continual improvement will help us to stay the course through mistakes and learning situations. TRUST in ourselves will help us to authentically use and live the beliefs we want; this goes deeper than "modeling" the practices of others. And all of this will help us to build trust across the system.

TRUST is often the first thing threatened in times of change and increased accountability. How often have we felt that our professional judgement has been compromised? When folks feel threatened they hang on tightly. TRUST requires some letting go. We know that great schools depend heavily on cooperative endeavors. Relational trust is the connective tissue that binds individuals together to foster collaboration, encourage innovation and ultimately advance the education and welfare of students.

Transforming our schools requires us to think harder about how best to organize the work of adults and students. TRUST is the key to maintaining relationships that are healthy and strong; laying the foundation for best practice!

Everything I need to know, I learned from Noah's Ark

ONE: Don't miss the boat.

TWO: Remember that we are all in the same boat.

THREE: Plan ahead. It wasn't raining when Noah built the Ark.

FOUR: Stay fit. When you're 60 years old, someone may ask you to do something really big.

FIVE: Don't listen to critics; just get on with the job that needs to be done.

SIX: Build your future on high ground.

SEVEN: For safety's sake, travel in pairs.

EIGHT: Speed isn't always an advantage. The snails were on board with the cheetahs.

NINE: When you're stressed, float awhile.

TEN: Remember, the Ark was built by amateurs; the Titanic by professionals.