TO: Dickinson Public School District

From: Tanya Rude, board member

Re: National School Board Association (NSBA) 2015 Convention in Nashville, TN, March 20-23, 2015

Attending the NSBA convention is always a great way to learn the national best practices in school districts nation wide, this year was no exception. Thank you to the Board for allowing the board members to attend, and thank you to Twila Peterson for making the necessary arrangements every year.

The brief notes on each session I attended follows my points for the board to consider. If there are any questions or clarifications that need to be made please feel free to contact me.

The past three years I have been afforded the opportunity to attend the National School Boards Association conference and learn the national best practices in school districts, this year was no exception. Before getting to my thoughts on the overwhelming number of sessions I attended regarding districts who have 1:1 devices, I want to briefly discuss a session that was presented by a district who played a huge hand in developing an online, confidential school climate survey/software that was designed to identify students who are perhaps in a social/emotional crisis, whether from home or school environment. You can find the notes in the pages to follow, but it provides school counselors with real time opportunities for intervention in students lives each day. You can also find a link to a write up regarding their "Climate Survey"within my notes on the session.

Back to the 1:1 devices. Over the last three years I have seen an increase in the nationally recognized districts as those who have moved to 1:1 initiatives within high schools, and the trend I saw this year is an increase in the use of technology heading into the middle and even down to the elementary school level.

Here are some points for the board, administration, and district to consider regarding 1:1 devices:

- 1. Why we need to move our district to more 1:1 device use:
 - a. Accelerates learning through integration of technology, academics, and career education.
 - b. Prepares students to Be more college and career ready.
 - c. Students are more engaged in their learning and pass with better grades.
 - d. Creates more of a mentoring role of teachers instead of instructional role.
 - e. Education is no longer limited to books.
 - f. Technology can be the conduit to learning required material.
 - g. Allows more opportunity for problem-based learning.
 - h. We can change where students are going, not where they come from.
 - i. Could provide an opportunity not normally taken when students need some guidance on personal or academic matters, by allowing them to send a quick note to teachers or counselors without other students even knowing.
 - j. Financial savings of moving to a digital platform: eBook prices are lower than textbooks, online content readily available, no printer costs: no paper or toner costs, assignments can be handed in through dropbox, etc.
- 2. How we move our district to more 1:1 device use:
 - a. Start with the board, then administration, etc. Must move from top down. Make it the new norm, change the culture.
 - b. Get a group who has helped get 1:1 off the ground at several locations, they already know the mistakes to avoid.
 - c. Infrastructure (wifi, network, power, support, knowledge base, operations) MUST be in place to handle 2-3 devices per person in each building.
 - d. Staff Professional Development (vast variety of how districts have done this), initial and ongoing a must.
 - e. Student help desks even helping teachers!
 - f. Allow failures, but learn from them. It will not be easy getting it up and running.
 - g. Allow teachers to be CEO's/facilitators of their classroom.
 - h. Increase community involvement in students education (by encouraging free wifi hot spots for students, collaborative learning with businesses, etc).
 - i. Set a date, say 3 years out, and work backwards to accomplish a complete 1:1.

- 3. What we should expect to see with use of 1:1 devices:
 - a. Frustration first few weeks, then great outcome.
 - b. Increase in graduation rates.
 - c. Higher student academic achievements.
 - d. Student involvement in personal learning, initiative driven to move forward.
 - e. Students helping students.
 - f. Fewer discipline issues.
 - g. Teachers being more available to help students who need the help.
 - h. Increased ability to perform formative assessments instantly.
 - i. Assessments done to inform teachers in areas needing more instructional time.
 - j. Greater understanding of how to solve problems in the real world.
 - k. Higher skill sets and ability to collaborate with other individuals to accomplish real solutions.
 - 1. Making students career ready, which is more demanding than college ready.
 - m. Teachers working between departments to achieve student driven problem based outcomes.
 - n. Increase in trust between parent/community, teachers, administrators, and board.
- 4. Problems that will be encountered, that need to be faced head on:
 - a. Funding/resource support
 - b. Infrastructure
 - c. Failures-must learn and move on
 - d. Clarification of on-line content: what is "good" and what is not.
 - e. Socially inept students perhaps caused by not enough face to face communication.
 - f. Teaching students personal skills:
 - i. responsibility
 - ii. contemplative
 - iii. initiative driven
 - iv. perseverance
 - v. optimism
 - vi. courage
 - vii. respect
 - viii. comparison
 - ix. adaptability
 - x. honesty
 - xi. trustworthiness
 - xii. loyalty
 - g. Students not understanding digital footprint
 - h. Community/parent support and involvement
 - i. Misuse of device, various apps, etc.
 - j. Change is hard! (In this case, well worth it when look at student outcomes.)

NSBA 2015 Sessions Attended with Notes:

Leading Change to Make College and Career Ready presented by William Dagget, on Friday, March 20,

2015, at 1330. PowerPoint supposedly going to be sent, however the link sent was not exactly what was shown in the session: http://www.leadered.com/keynoterpp.html Here are a few of the short comments from Mr. Dagget who had lots to share:

- Excellence and Equity are tough to match in public schools.
- School purpose is school, always reaching for the next level of education. What are we having kids strive for in the "next level of education" when finishing high school?
- Schools have changed: standards, tests, & teacher evaluation.
- Technology has changed: how we communicate, play, shop, workplace, world.
- Relationship between pressure on schools and the world around them are more complex.

What do we do to help the change?

- Business world is pushing change, in the world and the nation.
- Bipartisan push to change education from the top down.

Recommendations, based off research he participated in:

- Looping elementary teachers, middle (8-9) grades.
- No electives in 12th grade, just hard core academics.
- Most improvement occurs in the board room, goals take control of what is urgent vs. important.

Usually boards focus on: content (standards, PD, assessment) methodology, academic tenacity/mind set (belong educationally and socially, see school as relevant, work hard and postpone immediate pleasures, not derailed,) parents/community. What we should focus on is effectiveness based off of research.

Mr. Dagget researched teaching effectiveness:

- Did meta analysis. Best is by Hattie, who identified things by 1 deviation from the norm.
- We cannot change where students come from but we can change where they are going.
- Eliminate department chairs. Put two different department teachers who like each other together, same kids go to both teachers and allow teachers same prep time.
- 70% of kids are not eligible for the military because of literacy.
- Gaming is increasing and is being built based upon brain research.
- Teaching should be engaged, personalized, built on growth models, tied to standards, merging with online providers.
- Every district needs clarification with online content.
- Relevance to the real world in preparation is necessary.
- College and Career Ready = it is not an "or". Really we need to be career ready!

International benchmarked performance competencies:

We, the US, test different areas of students education and require more memorization of formulas than students taking the PISA. We expect more knowledge of the students, where the PISA test looks to the application of the knowledge, giving them the formulas to see if they know how to properly apply the formula and get the proper answer.

PISA high performing nations are: homogenous, equity, tutoring sessions, culture of high expectations, and Knowledge vs. Application . The students from these nations are picked out and basically groomed for the testing and their future from an early age.

Various thoughts continued:

- What you assess is what you value. Math and science need to work together as a unit.
- Culture trumps strategy.
- Move to Lexile grading scale.
- NAPE is the trend/prototype of where we are going as a school. Schools should be looking at scores from Lexile scale.
- Summative evaluation to formative evaluation.
- Be proactive: start with changing report cards to Lexile framework "student profile".
- High Schools need to teach reading.
- Emerging trends with guiding principles (responsible, contemplation, initiative, perseverance, optimism, courage, respect, comparison, adaptability, honesty, trustworthiness, and loyal)
- Creating the culture: start with the board, then administration, faculty and staff, parents/community, kids.
- Over fixation of the standard is lowering the standards for the top 1/3, being a disservice to students.

- Survey tools to teacher and students "we surveys" teacher gets class, principal gets aggregate of school and board gets aggregate of district.
- Teacher is facilitator not moderator. Change needs to come with top down support for bottom up change. Have top 3rd of teachers unleash change, and see where it goes.

Jane Pauley, Saturday, March 21, 2015, 8:30

Originally Indianapolis, Indiana, Warren Central District.

We must be able to teach the children we have, not the ones we used to have. Quote from someone else but used to springboard speech.

- Greatest deficiency was youth when starting career out, she got over it.
- It is a different world, must be in the present. Students must be lifelong learners.
- Culture has not caught up with the changes. Life is getting longer, older is getting younger.
- Change can come unexpected, unbidden, and un-welcomed.
- Your life calling, inspiration every where, but you have to be looking.
- Various stories told of different individuals and what they do to help others and at different ages volunteering.
- Personal re-invention story: follow through with thoughts. To move forward you must be moving. You must be intentional, imagine, and move forward. Is life like a fire drill? Have a plan, when exiting know the door has a hinge and you can go both ways. Must try!
- Don't wait for the leader on a white horse, take charge and look for ways to change and be the leader.
- Anger is an important emotional substance to motivate change. Stay in the fight, step up to the challenge, commit to change. Old people know stuff! Dammit!
- Inspiration is everywhere, find it everywhere you look.

Addressing Today's Challenges Within the Context of Emerging Trends, day 2, presented by William Dagget, Saturday, March 21, at 10:30

http://www.leadered.com/keynoterpp.html Again the link for the PowerPoint supposedly presented is provided, however I do believe that the PowerPoint presented was different than the link provided.

- Board took control of agenda. By taking control of culture, student performance was key. What is best for kids! Create a culture of student achievement.
- Put a stake in the ground 3 yrs out and work back to make the change.
- Technology needs to transform schools. Catch the culture: instagram, snapchat, etc.
- Kids have no clue of their digital footprint/tattoo. MUST BE TAUGHT!!!!
- Wolfram Alpha, can have a paper written and printed out with criteria set, without kids doing the research or writing it themselves.
- Photo Math, kids use to get work done for them in math.
- Prepare kids for technological advances, teach digital literacy. College admissions are creating a digital images department (looking up students prior to admission) as first filter if kids will be successful in school and life.
- Most technology didn't occur until 2008. Common core written in 2008.
- Gaming/gamification: districts need to come up with policy.
- College AND Career Ready. College freshman are not ready for college, businesses won't take them. We should be getting kids ready for career, which is a higher standard!
- College graduation rates are extremely low!
- Your MAJOR MATTERS A LOT! Other nations seem to get to the kids that their majors matter!
- We need to teach for high skill jobs.
- What technology did to low level jobs in last 30 yrs will occur with middle level jobs in next decade. If you can write an algorithm to do a job, the jobs will disappear. How transferable are teacher skills? Look at Application Model: application to real-world predictable situations and application to real world unpredictable situations. This is not what/how we are teaching.
- Bloom's taxonomy, should be searching to achieve section D. Relevance makes rigor possible.
- PISA discussed
- What you assess is what you value.
- Rigor is really important!
- Create a culture, look at issue kids will face, move from there. personal skills are necessary.

JUNE 28 -2 ATLANTA GEORGIA send a team to see presentation and talk to teachers. Here is a link provided to give more information on the Atlanta, Georgia Model Schools conference: http://www.cvent.com/events/2015-model-schools-conference

Beyond Blended Learning: Making the Transition to Personalized Learning, by Anne Brown, Saturday, March 21, 13:30

Innovations High School, by Mr. Grover on the School Improvement Network: student centered. See video on School Improvement Network site: http://www.schoolimprovement.com/.

- Must relinquish control of pacing and access to curriculum.
- Strong mentorship, students decide how long and what they do.
- Eight hour school days, planning was a 7 year process.
- Teacher always available from 8 to 5. Kids get a mentor teacher and make sure they are meeting subject requirements over their high school career. There is no bell, they could choose to finish one course before working on another subject. This provides opportunity to excel and move into taking college credit by junior year.
- Allows a better 1:1 opportunity
- Another video by Student centered learning. Not teaching large group, but at small group or even more individual. It is the student working at their own pace. It is about autonomy.
- Everything in school is by instructional level, though they may be on different levels in the same grade. The grade level doesn't seem to matter.
- Technology and curriculum left to teachers, outside of this program, were overwhelming. Planning and getting together prior to implementation and having an effective personalized learning plan, changed the way teachers felt in this program.
- Tough for students, and teachers, first few days: technology, login, and rules. Fabulous outcome once they
 got rolling.

<u>Using Personalized Learning and Online Assessments as a Lever of Change,</u> Metropolitan Nashville Public Schools, COSN, ENA, and eLearn, Saturday, March 21, 15:45

Session handout:

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- Formative collection of data in a personalized classroom. Online assessments will probably not go away.
- Must have infrastructure first: wifi, network, power, education support system for all, knowledge base, operations, etc.
- Focus on personalized learning, labs allowed moving in and out of classes as needed basis.
- High school is currently 70% of instruction. The content will be, if not already, digital, adaptive, personalized, and self paced. This is where the nation and world is moving.
- Middle School is 50% of instruction and content will be, if not already, digital, adaptive, and personalized.
- Elementary 30% of instruction and content will be, if not already, digital and adaptive (quick formative assessment then drive personalized instruction).
- Need flexible furniture, to allow movement and comfort, non stressful.
- Librarians necessary for design of instruction.
- Get right kind of software.
- Technology will make a bad teacher worse.
- Online course for technology was PD, required to take. The board bought out the retirement of those that didn't complete. Required!
- Everyone must by in, or will be challenging.
- When hiring prospective teachers, they must pass teacher technology literacy assessment.
- ConnectEd occurred
- Devices will be in need every year, and how about refresh devices.
- Teacher accountability, school based budgeting allows honing ability in for special areas that still need more work.
- Strategic plans direct target strategies for individual planning.
- It takes 1/2 day to carve away baggage that blocks learning, by doing individual learning the student is then able to be in charge of their own learning, which can advance them quicker.

Project-Based Learning in Action: Results from the DLR Group Innovation Challenge, Sunday, March 22, 8:30

- DHS students participated in a PBL with/against two other school districts in the nation
- Students who participated learned a great deal, not only about their subject, but also how to help solve real world problems using a variety of different techniques
- DHS students did a fabulous job representing DPS, both academically and socially

David Pogue, Yahoo founder, presented at 10:00, Sunday, March 22, 2015

- Playing music on phone is bringing people together.
- Augmented reality: word lens, TAT,
- Internet of things: thermostat, ionty, airBnB, task grab it, uber, fitness tracker, etc.
- Web 1.0, 2.0
- The next generation: mobile+social era, change is always scary, 3.0
- Don't fear new technology!

Early Prevention of Bullying and Psychological Disengagement: New Technology to Assure Success for all Students, presented by Meriden Public Schools, Connecticut, Sunday, March 22, 2015 at 1330.

A brief article of Meriden's "Climate Survey" is found at: "Reach victims using confidential, not anonymous, surveys"

- Developed an online, confidential school climate survey/software designed to identify students who are perhaps in a social/emotional crisis.
- Covered their goals to begin with: to determine which individual students are in most need of extra support in the school (increase graduation rates and decrease potential bullying)
- Provides school counselors with real time opportunities for intervention
- Personal reflections by 4 various individuals within the district.
- Dream, believe, and innovate
- Adopted growth effort no zero policy, no time line, encourages completion.
- Opened access to ALL classes, college classes available with support, supported staff as well (The Dream Manager by Matt Kelly), increased teacher support toward more positive, student perceptions of wanting to be in school, climate surveys performed twice a year-allows evaluation of kids over time.
- Climate survey is online and can view data for student success, motivation, safety, respected, social and emotional help.
- Survey is a developmentally sensitive system, confidential, know who logs on so can help individually, trigger emails produce actionable data (will need protocol), drilled to lower grade level to help later in schools, "identified" not targeted, scientific valid questions which were tested through factor analysis and allows effective intervention.
- Students are at the center, they have a voice, district wide technology center, increase in mobile devices everyone has them-own or school lent, teachers okay with asking a student how something works.
- Family-School liaison team, a positive support for new students
- Database can be narrowed
- "Cares" data can occur anytime during the year when someone might need a little help now.
- "Getting to know you" survey
- Students at the center
- According to their write up, this survey/software is a free system, might be worth checking in to.

Personal thought: perhaps do survey at beginning and middle of year instead of this districts way of beginning and ending of school. By doing it in the middle of the year, the students may be able to get help before school gets out.

Innovative Solutions to Expand Students' Educational Capacity While Shelving Textbooks and Moving Forward to a Digital Platform to Increase Students' Achievement and Engagement, Connected Learning Consultants connectaz, presented Sunday, March 22, 2015, at 1545.

The following session handouts were made available:

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- Standfield Elementary School District opened school without books, kids had d's beginning, ended with c's and b's. Learned from mistakes, and now know what to avoid.
- First hand experience opening 1-1 all digital school, 0 computers lost, replacement cost in 4 years \$10,000. Migration rate 30%, self insured digital, published list of places with wifi-ultimately most places had wifi.
- Accelerating learning through integration of technology, academics, and career education to prepare every student to be college and career ready
- Recycles iPads: students can buy the one they used or the district resells to an organization that will recycle
 them.
- Teachers each received a pad when they attended a training for them over the summer.
- Didn't make it mandatary for use in classroom. What they found was the students who had them in class were more engaged and passing with better grades, and it has done away with summer school.
- Cost savings of moving to a digital platform: eBook prices are lower than textbooks, no printer costs: no
 paper or toner costs, resulting in cost savings for districts. Some teachers developed their own curriculum,
 doing away with eBook costs completely
- Community involvement for increasing areas of free wifi
- Printers are being replaced by Dropbox
- A lot of noise from everyone at first, but risk very good. Other side of frustration is success.
- Teacher self efficacy is key.
- Do authentic staff development!
- Teachers need to be the CEO of their classroom. Always put kids first.
- iPad cost \$299, insurance was \$25, which could be bought through the school or the family had to have their own insurance on it. Chromebooks will probably be bought for English department use for writing papers, but will leave there at the school.
- How effective would your school/district be if everyone were relying on someone other than themselves?
- Teachers need to know that it is okay if they fail. Build trust & Respect is paramount!
- Being a teacher: first impression-doubt set in, adapted the way she taught, had standards and computer, had to change mind set and teaching style.
- Most university teacher training programs are not being taught technology.
- First days of trainings to be all digital. Not enough and worried about unnecessary things (hindsight realization).
- Reality set in as they opened. Best laid plans went bye-bye. Students knew how to do things before most teachers. Teachers began using that to their advantage.
- Teachers had the learning curve, concerned about the wrong things.
- Three levels of teacher success: users of technology, wanting to learn but do not feel comfortable, completely against technology. Ultimately, teachers learned the tools to improve their life and engage students. Was able to individually test and choose to move on or go over material again with the students needing extra help.
- Things learned that need to be changed, they made the changes, learned on the fly, teachers became better teachers, administration needed to trust through failure, technology became conduit to students learning material.
- Not limited to books, became student centered, teachers fine tuned style to teach to technology-became CEO of the classroom, differentiation instruction, ELL students can succeed without translators, mentoring for those struggling teachers, and many other benefits.
- Suggestions from a teacher who went to 1:1: Embrace change, don't use eBooks all the time, collaboration, staying positive, foster community of helpers, trust built between administration-teachers-and staff, never stop learning-look for innovation, take risks, learn from challenges.
- Stanfield Elementary school district: changing to technology based learning, very rural, financially poor student body, not much Internet/cable in community, pitfalls still will happen, 1:1 in 6-8 grades, 1:3 in 3-5, and plan to get 1-1 in 5 years.
- Technology needed to be taught, targeted support, PD is vital to launch.
- Kids are smart and can get ahead of teacher, though teachers have begun using it to their advantage, books for now don't go home.
- What would it look like if the kids get out of school with no technology learning?

Accelerating Learning Through Integration of Technology, Academics, and Career Education to Prepare Every Student to be College and Career Ready, presented by Upper Cape Cod Regional Technical School, Monday, March 23, 09:30

Session handout:

http://static.coreapps.net/nsbace2015/handouts/e98470a78a63d603a914ee4b4bf414f7 2.pdf

- Technology utilized in academic and technical environments
- Technology used to integrate disciplines
- Spoke of planning, implementation, where things went wrong, recommendations for smooth transitions to a 1:1
- Showed some of the areas the students were able to use and integrate information to solve local problems.

<u>Problem Based Learning with Community Partners</u>, Penn High School in the Penn-Harris-Madison School Corporation, in NW Indiana. Presentation was Monday, March 23, 2015, at 1030.

PowerPoint presentation link:

http://static.coreapps.net/nsbace2015/handouts/e98470a78a63d603a914ee4b4bf30081_2.pdf http://clearslidemail.com/view/mail?oeID=HKQ9BWLJB7Y9VPUJWJHC

- A-rated school by IN DOE
- Problem-Based Learning with Community Partners
- Has highest academic achievement while having highest rate of free/reduced lunch students in district history.
- Organizational structure is different: have academies/house for students. Same students go to same math, geography, biology, and english classes. Common house prep and common content prep. Extra classes done outside of common academy/house.
- Graduation rate in 2007 was 70%, graduation rate in 2013 was 97%.
- Emphasis on curriculum, instruction and assessment, both vertical and horizontal articulation.
- Focus occurs on what they want to do AFTER graduation, so they pick achievement academy
- Common assessments on performance tasks and acuity.
- Assessments are to inform teaching: learning-feedback-learning loop
- Authentic College and Career Readiness: Building skill sets, embrace higher order thinking, and PBL.
- Focus on metacognition
- Instruction is on best practices.
- Professional Development (PD) focuses on: job embedded, ongoing, focused, relevant
- PD for administrators and teachers
- PD: writing, Lucy Calkins; Technology supported; Differentiated instruction; Response to intervention; Common assessments, Problem-based learning; Teacher effectiveness rubric
- Advisory Board for each academy, not learning about it but doing it. Employers want collaboration, etc.
- Why problem-based learning? It is: relevant learning, engagement increases, mastering essential standards within a real world context, practice 21st century skills (collaboration, creative problem solving, and technology)
- Collaboration occurred with community partners to guide students to help solve real world problems, resulting in problem solutions and ultimately career/educational assistance from various community partners.