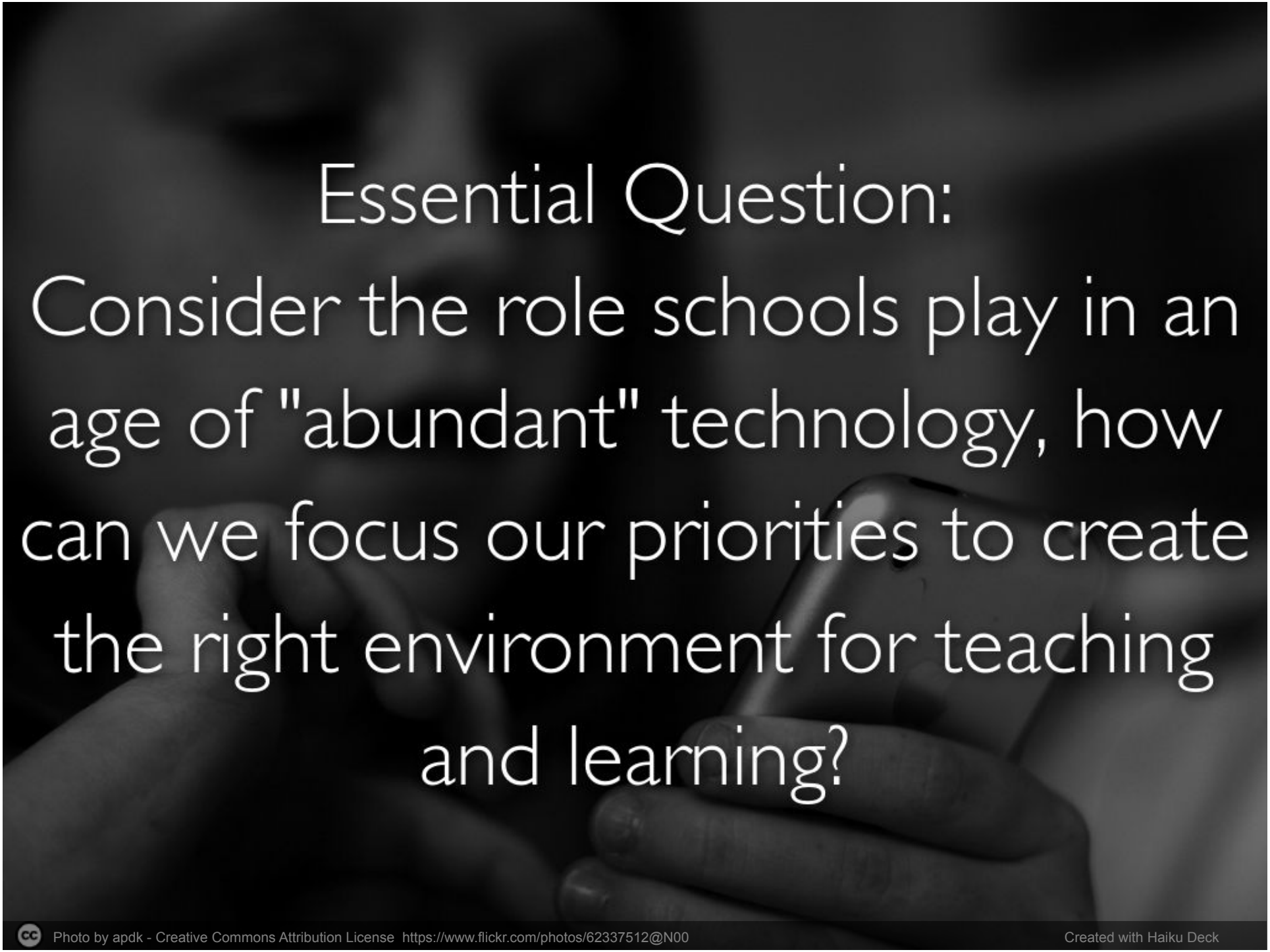


STRATEGIC PLAN

1. Support teaching and learning using One-to-One technology implementation.
2. Support teachers with technology facilitators/support at all buildings.
3. Provide differentiated and supported staff professional development.
4. Update infrastructure to support teaching and learning.

HORIZON REPORT

KEY TRENDS, SIGNIFICANT CHALLENGES, IMPORTANT DEVELOPMENTS

HORIZON REPORT

Key Trends

HORIZON REPORT

Significant Challenges

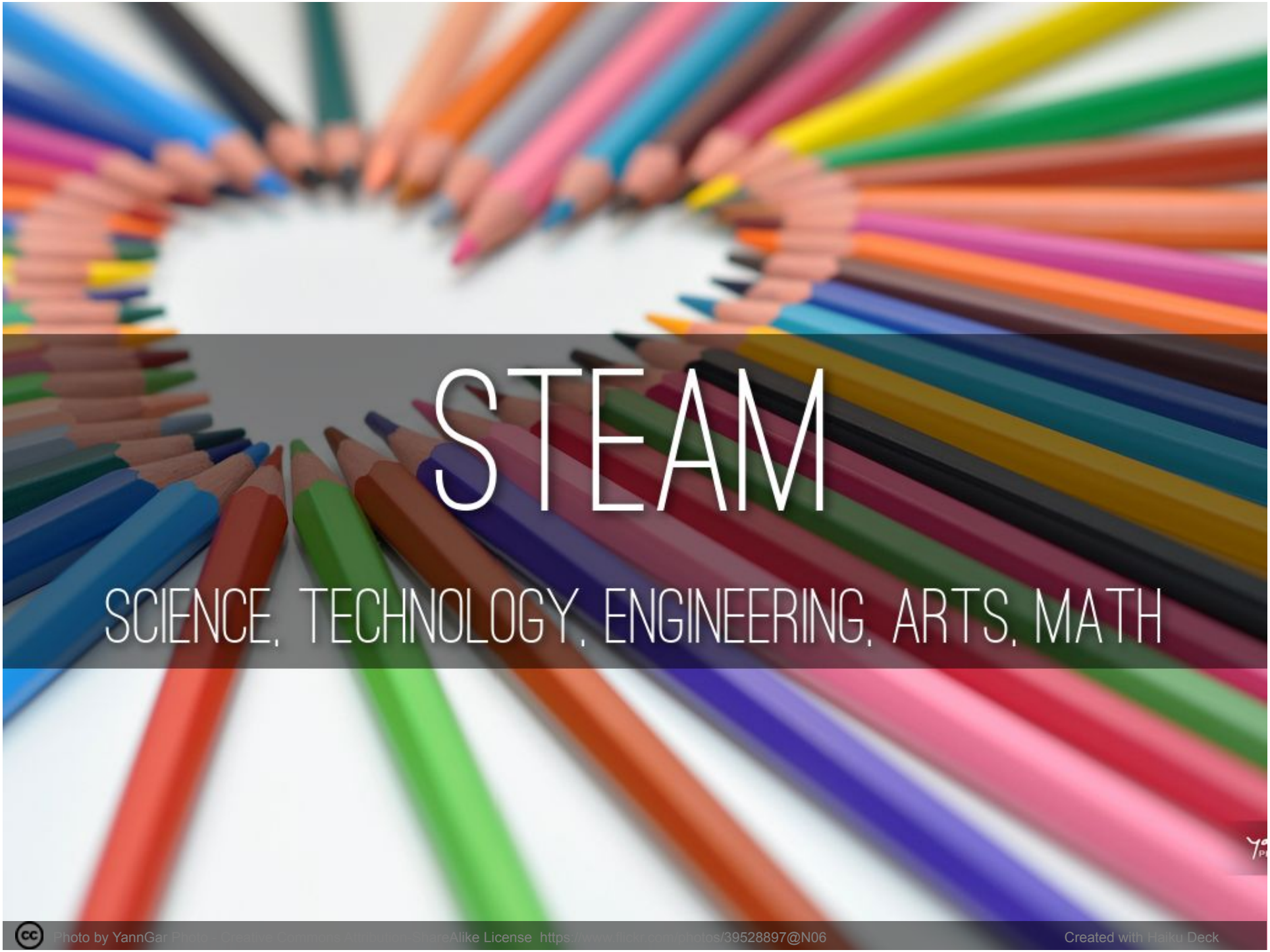
HORIZON REPORT

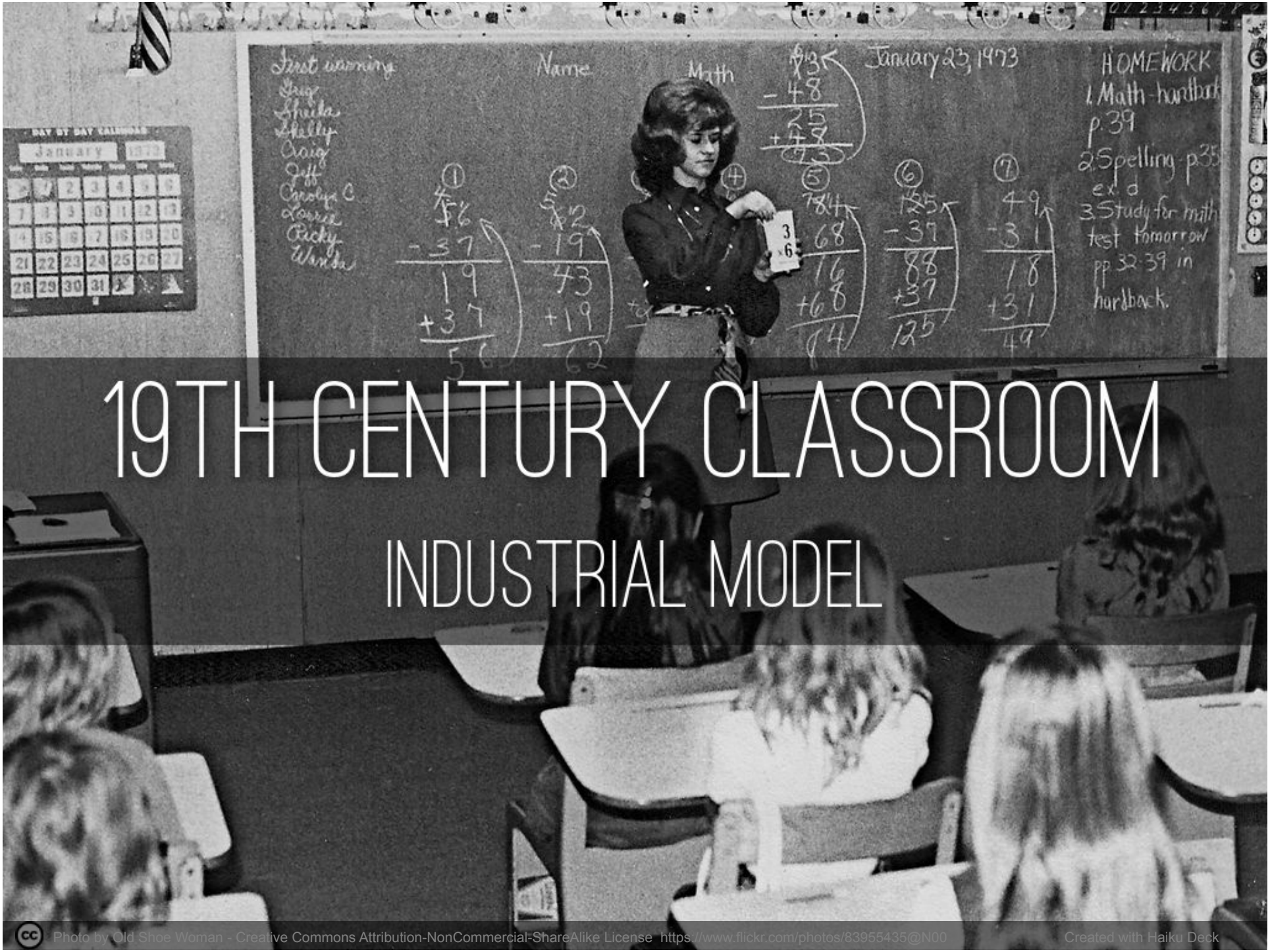
Important Devlopments

INNOVATE

1. Personalized Learing
2. Open Educational Resources
3. Cloud Computing
4. Games and Gamification
5. Safety of Student Data
6. Wearable Technology

Ambitious Opportunities … Future Focus



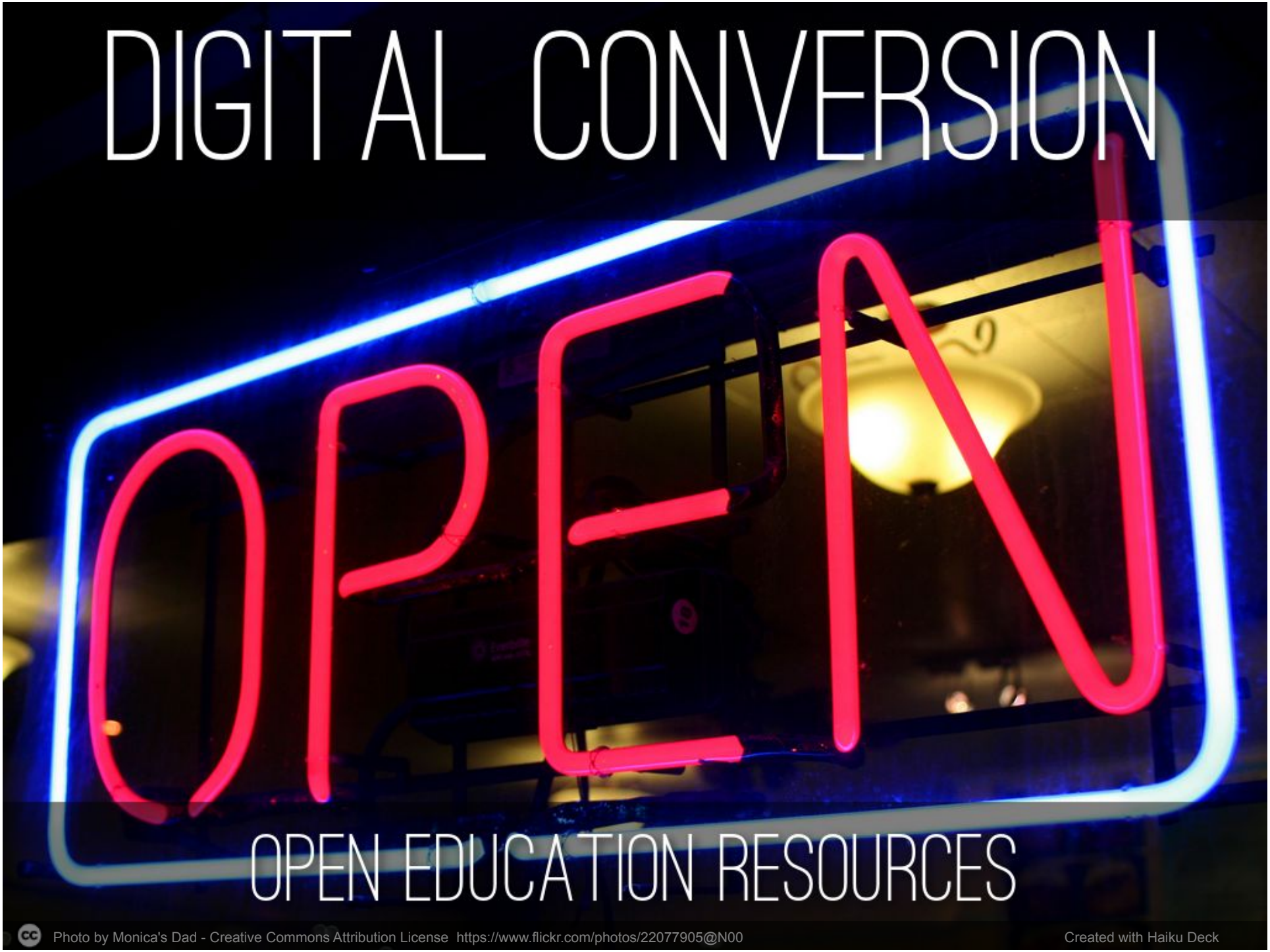


19TH CENTURY CLASSROOM

INDUSTRIAL MODEL


FLEXIBLE SPACES
21ST CENTURY CLASSROOM

Blended Learning



Telling Our Story
The Winnetka Experience
#WE36

NEXT STEPS

- MLI Measures Presentation- June School Board Meeting
- Strategic Planning Revisions
- Summer Institute: Design Thinking
- Continue Building Capacity (Winnetka University and Winnetka Parent Institute)

Q & A

MAUREEN CHERTOW MILLER, DIRECTOR OF TECHNOLOGY, WINNETKA PUBLIC SCHOOLS DISTRICT 36

THE WINNETKA PUBLIC SCHOOLS DISTRICT 36

A Community of Learners

21st Century Initiatives - FY 2015-2016

TO: School Board

FROM: District Technology Committee
Maureen Miller, *Director of Technology*

April 28, 2015

Essential Questions

- Consider the role schools must play in an age of "abundant" technology, how can we focus our priorities to create the right environment?

Strategic Plan

The Strategic Plan lists four goals for Technology:

1. Support learning using One-to-One technology implementation.
    - The Mobile Learning Initiative is in year two. Student outcomes have been established and measures for the success of the initiative have been outlined and data has been gathered. Additional details from the MLI are included in the Mobile Learning section of this memo.

2. Support teachers with technology facilitators/support at all buildings.
    - Technology facilitators are in place throughout the District, but teachers have indicated the desire for additional support. Currently, one technology facilitator is shared between the three elementary schools and the technology facilitators at the two middle schools have duties in addition to facilitating.

3. Provide differentiated and supported staff professional development.
    - The Winnetka Teacher Institute (WTI) dissolved with the new collective bargaining agreement. The new platform for differentiated staff professional development, Winnetka University, was in the planning stages this year.

- Professional development was folded into "Lunch and Learns" and early release days. The District's November Institute Day, we implemented an "unconference" format with #TechCamp36

4. Update infrastructure to support teaching and learning.
    - The technology team implemented many infrastructure updates this year. The most significant was taking our bandwidth from 50 Mbps to 600 Mbps. In terms of infrastructure, we will continually make upgrades to support the needs sprouting from classroom integration of new technology

Background

Technology is a moving target, constantly evolving. The good news is that most technologies are less expensive and faster, and sometimes smaller. To ensure that teaching and learning is keeping pace with the changing times, new technologies must be explored, piloted, evaluated and adopted.

A valuable resource to chart the course for The Winnetka Public Schools is the *Horizon Report*, a collaboration between The NEW MEDIA CONSORTIUM and the CONSORTIUM FOR SCHOOL NETWORKING (CoSN). The 2014 panel was composed of 53 technology experts from 18 countries on six continents this year.

The project panel examines emerging technologies, challenges and developments for their potential impact on and use in teaching, learning and creative inquiry for K-12 schools. The report provides educators a valuable guide for strategic technology planning framing the information into three time-frame "horizons."

The 2014 *Horizon Report - Key Trends*

Fast Trend **2-5 Years**	**Mid-Range Trend** ***3-5 Years***	**Long-Range Trend** ***5+ Years***
Rethinking the Roles of Teachers	Increasing Use of Hybrid Learning Designs	Rapid Acceleration of Intuitive Technology
Shift to Deeper Learning Approaches	Increasing Focus on Open Educational Resources	Rethinking How Schools Work

The 2014 *Horizon Report - Significant Challenges*

Solvable Challenge:	**Difficult Challenge:**	**Wicked Challenge:**
Those that we understand and	***Those that we understand but for which solutions***	***Those that are complex to even define, much***

know how to solve	*are elusive*	*less address*
Creating Authentic Learning Opportunities	Complex Thinking and Communication	Competition from New Models of Education
Integrating Personalized Learning	Safety of Student Data	Keeping Formal Education Relevant

The 2014 *Horizon Report - Important Developments - Time to Adoption*

Time-to-Adoption Horizon: ***One Year or Less***	**Time-to-Adoption Horizon:** ***Two to Three Years***	**Time-to-Adoption Horizon:** ***Four to Five Years***
Bring Your Own Device (BYOD)	Games and Gamification	The Internet of Things
Cloud Computing	Learning Analytics	Wearable Technology

The 2015 report will be published in June, but the work of the panel can be found on the "2015 K-12 Edition Wiki." By looking to the Horizon Report and using our own Professional Learning Networks (PLN) we are able to evolve our learning landscape to meet the needs of our current and future students.

Mobile Learning Initiative: Year 2

In 2014-2015, The Winnetka Public Schools piloted iPads with one pilot classroom per grade level for grades 1-4 and one team per grade level for grades 5-8. The pilot was expanded in 2015-2016 with every student in grades 5-8 receiving an iPad for school and home use. In the three elementary schools, four iPad carts (class sets) were provided for in-school use by grades 1-4.

The American Library Association's Digital Literacy Task Force defines digital literacy as "the ability to use information and communication technologies to find, evaluate, create and communicate digital information…" This year, we have witnessed students and teachers taking the reigns of the Mobile Learning Initiative to demonstrate their Digital Literacy skill set. While students are bolstering their technology skills, they are also reflecting deeply on what they are learning in order to convey their thoughts in a multitude of ways. Some examples include:

- Students at Hubbard Woods have been "App Smashing" by using Garageband, Book Creator and iBooks to create their own pictures books

(link to Pioneer Press article).

- Skokie School math students create video explanations of their work using the Doceri App.
- At Greeley, MLK, Jackie Robinson, Rosa Parks, and Ruby Bridges come alive through Shadow Puppets EDU App on the iPads. Students worked in groups about their favorite American Hero. They wrote about their hero, then narrator their stories with photos.
- Carleton Washburne teachers are utilizing the flipped classroom model and actively using Schoology for collaboration and communication.
- Crow Island is collaborating and communicating with Google Apps for Education and using the Motion Math apps for a fun way to learn math concepts.

As presented at the January School Board meeting, we will be using several measures to assess the success of our Mobile Learning Initiative. Our first data set will be presented at the June School Board meeting. We will be taking a deep look at the data and using it to inform our professional learning practices, student expectations, and framing our Parent Education.

Ambitious Opportunities: Future Focus

The Winnetka Public Schools can lead the way with creativity and innovation. Looking to the NMC Horizon Report and other resources, Winnetka Public School District 36 is exploring several emerging trends for teaching and learning with technology. These initiatives have the potential to transform teaching and learning while maintaining our legacy of Progressive Education through experiential learning, problem solving and critical thinking.

Taking on these ambitious opportunities will help our students with the key skills of critical thinking, problem-solving and higher-order cognition. Students approach learning differently now. Research, project based learning, and inquiry/problem solving activities will become second-nature for our students.

STEAM (Science, Technology, Engineering, Arts, Math)

STEAM is a framework for teaching that is based on natural ways of learning and is customizable for all types of educators and students. STEAM ties ALL the subjects to each other in an interdisciplinary way with an emphasis on exploration, creativity and problem-solving. Skills essential for adapting to the rapidly changing global world we live in. Most often, people hear of STEM education, by choosing STEAM education as our focus, we are purposefully demonstrating the value we place on the Arts.

The Skokie School Digital Literacy space transforms into a MakerSpace at lunch time. This space is an example of the beginnings of a full STEAM experience. Students complete tasks based on interest and explore deeply with Mrs. Kathy

McDonough and Mrs. Kacie Feeney providing resources and facilitating their learning. These students have even shared their voice by presenting at the Students Involved with Technology (SIT) conference and will be representing The Winnetka Public Schools at Tech 2015 in Springfield, an opportunity to share with our State legislators how technology plays a critical role in preparing students to succeed in today's world.

To explore STEAM opportunities, we have visited and researched schools currently implementing STEAM or STEM. Some of the take-aways from these visits have included the vast opportunities for student-centered learning, student voice, and differentiation.

Innovative Spaces/Flexible Learning Spaces

Traditional learning spaces are based on the 19th Century Industrial Model for education when classrooms were teacher-centric, lacked flexibility and individual focused rather than group focused. Classrooms have improved since then, we have better desks and chairs that can be moved to form small pods, classroom walls and spaces are used to display student learning. However, with the introduction of more technology into the classrooms, particularly mobile learning, and a shift to student-centered learning, classroom spaces are in need of dramatic makeover.

Characteristics of 21st Century Learner include:

- media savvy
- flexible and dynamic
- multitasking
- communicators and collaborators
- interactive and networked
- reflective and critical
- creative and adaptive
- anywhere, anytime learners
- multimodal learning styles
- Technology literate and adept

from EdOrigami-
http://edorigami.wikispaces.com/21st+Century+Learning+Spaces

Students and teachers deserve a physical space that adapts to learner demands. As instruction moves toward co-creation of the learning experience, the flexible, networked classroom provides an appropriate physical setting. Investment in flexible learning space design supports students and faculty and reinforces institutional commitment to educational excellence. Another great resource to explore is 21st Century Learning Spaces from Partnership for 21st Century Skills

The concept of flexible spaces is taking place in pockets throughout the school district and is an opportunity for future growth. In April of 2015, teachers were asked to show their interest in exploring this concept further. Several teachers have responded, and we will be moving forward with establishing a clear vision of flexible learning spaces, site visits to explore the possibilities and outfitting pilot classrooms for others to experience a flexible learning space.

Blended Learning

The term "Blended Learning" has been defined in various ways. Typically, Blended Learning integrates online resources with traditional face-to-face class activities. What's important to realize about Blended Learning is that technology is used to transform and improve the learning, not just supplement.

A great example of Blended Learning taking place in the Winnetka Public Schools is the Flipped Classroom model that is currently implemented by several science classes at Carleton Washburne School. In this model, the teacher creates videos, or links to existing videos, and students are asked to view the videos for homework. The videos are typically less than 15 minutes and allow the students to view the content at their own pace. Classroom periods are then transformed into hands-on work periods where the teacher is more accessible to answer individual questions, engage class-wide discussions or offer other means of support. It should be noted that this initiative has been underwritten by the Winnetka Public School Foundation research grants.

Digital Conversion and Open Educational Resources (OER)

With increased access to technology in the classroom, digital content as a curriculum resource becomes essential for students and teachers. Digital devices will not entirely replace printed materials, but The Winnetka Public Schools is building the evaluation of digital resources for teaching and learning into our Curriculum Review Cycle.

Advantages to having digital content include having the most up-to-date information available. Information printed in a textbook could be considered out of date the moment the textbook arrives on site. Digital content provides students the option of going beyond the print by clicking on an image to see an embedded video and offering many opportunities to extend their learning.

Many textbook companies are making the switch to digital content and have integrated their learning materials into structured learning platforms that allow teachers to customize and differentiate lessons for their students. Further, there are many digital resources available for free, referred to as Open Educational Resources (OER). Open Education resources include full courses, course materials, modules, textbooks, streaming videos and other tools and materials that support access to knowledge. Discovery Education and Atomic Learning

are examples of digital resources that could be integrated on a large scale. Some of the most utilized Open Educational Resources come from the CK12Flexbook Foundation, Khan Academy, MIT, and OER Commons.

Telling Our Story

Already, there are many great learning opportunity and experiences for the students of The Winnetka Public Schools. Principals and teachers communicate with parents to share the experiences via newsletters and parent nights. The next step is to promote ourselves and share broadly with a larger audience. We need to expand our reach so that everyone knows The Winnetka Public Schools as a leader for innovation and creativity in the classroom.

Several teachers and administrators have started using Twitter to tell our story. We use the hashtag #WE36 when sharing news regarding "The Winnetka Experience." Hashtags are used to follow "topics" vs. "people." A hashtag is a way to focus a conversation on Twitter or other social media platforms. A person can follow a hashtag without following a particular individual.

Carleton Washburne's community night to promote "Hour of Code," and Hubbard Woods students presenting at the Illinois Computing Educator (ICE) Conference, are examples of events that were represented well on Twitter with our #WE36 hashtag. Using social media provides many options for The Winnetka Public Schools to tell our story. From the beginning, with Carleton Washburne, to our current and future state with many ambitions opportunities to come.

Dreaming Big

We have the resources and drive to take on these ambitious opportunities. As Superintendent Kocanda continues to gather input from our stakeholders to form the "shared vision" of The Winnetka Public Schools, you will find that all of the above endeavors align to our vision of The Winnetka Experience.

Next Steps

- Present MLI data to the School Board in June
- Strategic planning revisions to align to shared vision
- Summer Institute on Design Thinking
- Planning for Winnetka University and Winnetka Parent Institute to support teaching and learning with technology

Parent education is important to the success of all of these initiatives. We want parents to be informed on best practices around teaching and learning, social media, digital citizenship and responsible use of technology. Parents and the

Winnetka community at large should have a window into our classrooms to better understand the evolution of teaching and learning in the 21st Century and beyond. We also want to provide resources for parents to manage multiple devices and student's access to information at home.

Click here to view the Presentation to be shown at the Board Meeting.