

KENSTON **N**

DISTRICT TECHNOLOGY PLAN

EXECUTIVE SUMMARY

FEBRUARY 2014

**"ANY SUFFICIENTLY ADVANCED TECHNOLOGY
IS INDISTINGUISHABLE FROM MAGIC."**

- ARTHUR C. CLARKE

**"ACCESS IS KEY. WITHOUT ACCESS, THERE
CAN BE NO CREATIVITY. WITHOUT ACCESS,
WE CANNOT ACHIEVE."**

NOW / SNAPSHOT

PK-3 / ELEMENTARY SCHOOL

Technology opportunities abound at Timmons Elementary School - SMART Boards, overhead projectors, iPads - all make a solid foundation from which to build a successful future system.

Among the current challenges lie lack of teacher training, lack of resources, and lack of a proper functioning, full-time support structure in the form of a dedicated technology coach for the building.

Instead, teachers serve that role through a supplemental contract, but in many cases their full-time job gets in the way of actual, long-term coaching of others, hampering real solutions and sustained progress.

Many teachers feel they lack technology, and perceive the current state as one where they don't have what they need, but in reality, time for and access to formalized training events would bridge the gap between current super users, and those that integrate technology at a lower level in their classrooms.

4-5 / INTERMEDIATE SCHOOL

Technology is a challenge at Kenston Intermediate School, with lack of up-to-date equipment, especially in the computer labs. With very few mobile devices, teachers aren't able to unleash the true potential in a highly kinesthetic learning environment.

Instead, staff and students are restricted to working in traditional lab environments, where the lack for true creativity is obvious.

Furthermore, like at TES, current challenges

include the lack of teacher training, lack of overall resources, and lack of a proper functioning, full-time support structure in the form of a dedicated building technology coach.

6-8 / MIDDLE SCHOOL

Kenston Middle School has really begun the move forward, progressing rapidly with Google Apps for Education primarily due to the strong support from the building leadership team. In addition, resources were shifted early on in fall 2013 to allow more support from the current technology coordinator - a system that has proven effective, and desirable.

Students and staff work together on projects, collaborating effectively.

However, current infrastructure limits hamper true potential, as the building is not able to take advantage of students bringing their own devices, rather many default to outdated computer labs with slow connection speeds.

9-12 / HIGH SCHOOL

The High School sees the most technology use on campus, with most classes, from Fine Arts to Mathematics involved in some form of integration on a daily or weekly basis. Many users are proficient at a higher level in using SMART Boards, polling software, online assessment systems, and tools for productivity. However, a lack of proper support structures still exist, and holds the key for true potential.

4 GOALS

1. ACCESS

The number one priority among staff and students in terms of working with technology, and technology integration, is access.

- Access to technology.
- Access to the internet.
- Access to appropriate resources.

Our goal is providing access for all stakeholders - including students, teachers, staff and administrators, as well as parents and community members:

- Access that is seamless, where students and teachers switch between technologies throughout the day without effort;
- Access that promotes use of both desktop, laptop, tablet, and mobile use;
- Access that allows insight, support, and achievement systemwide;
- Access that allows us to grow.

Access is key. Without access, there can be no creativity. Without access, we cannot achieve.

2. TRAINING

Training and support of students, teachers, and district staff is paramount to success.

Our goal is to provide ongoing, sustainable, and effective training in all areas of technology integration and curriculum, including opportunities both in face-to-face settings and online, using asynchronous media.

Our goal is one full-time technology coach per building, working with staff and students in a full-time capacity, with

technology integration and coaching support as their prime directive.

3. EQUITY

Equity in technology integration is key to long-term adoption, especially on a district level. Equity - where all parties are served equally, with equal opportunity to achieve, with equal voices at the table - will drive the district forward.

Our goal is to provide, and balance equity among all stakeholders, and provide accordingly to every need.

Our goal is to properly assess and manage technology resources, and disperse available resources according to where they will have the greatest impact on achievement.

4. SKILLS

Recognizing that skills drive the adoption of knowledge, the power to create and function in society, and the adoption of more skills, it is important to build skills around the district.

Our goal is to increase skills among all stakeholders in the following areas:

- Learning and Innovation Skills, including Critical Thinking, Communication, Collaboration, and Creativity;
- Life and Career Skills;
- Information, Media, and Technology Skills;
- Technology Skills in Core Subjects, including Language Arts, Mathematics, Social Sciences, Science, World Languages - at all levels.

TEACHING & LEARNING

IN EXPLORING THE ROLE OF TEACHERS AND STUDENTS, WE BELIEVE IN A SYSTEM WHERE:

Creativity, Innovation, and Student Learning

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments;

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

Digital Age Learning Strategies

Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in curriculum core documents;

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

Research & Information Fluency

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society;

Students apply digital tools to gather, evaluate, and use information. Furthermore, students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed

decisions using appropriate digital tools and resources.

Digital Citizenship

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices;

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Professional and Personal Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources;

Students demonstrate a sound understanding of technology concepts, systems, and operations, and continue to develop personal learning plans for constant improvement.

These are the qualities we are asking our teachers and students to work towards, and measure against. This is what success looks like.

LEADERSHIP

IN EXPLORING DIGITAL LEADERSHIP, ADMINISTRATION AND SYSTEMS THINKING, WE BELIEVE IN A SYSTEM WHERE:

Visionary Leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization;

Technology Coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.

Teaching, Learning, and Assessing in the Digital Age

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students;

Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.

Excellence in the Professional Practice

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources;

Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning;

Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.

Systemic Improvement

Educational Administrators provide digital age leadership and management to continuously improve the organization through the effective use of information and technology resources.

Digital Citizenship

Educational Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture;

Technology coaches model and promote digital citizenship.

These are the qualities we are asking our administrators and technology coaches to work towards, and measure against. This is what success looks like.

ROADMAP

Looking ahead towards 2020, and where we want to be as a school district in the future, we need to take action now.

INFRASTRUCTURE

It's the proverbial "Which comes first? The chicken or the egg?". In order to achieve access for all, at industry standard speeds, we need to invest in infrastructure now, to be able to support devices later.

Currently, we are not able to promote and take advantage of students bringing their own devices to school, because our network cannot support them adequately. We're unable to add additional mobile devices, such as laptops and tablets, because our current WIFI systems aren't dense enough.

A thorough inventory of current network systems, coupled with aggressive updates, modifications, and additions now will only benefit us in the long run.

Network infrastructure upgrades are imperative, and the need immediate.

THINKING MOBILE DEVICES

Along with the network infrastructure upgrades, we need to change the conversation towards mobile devices - laptops, and perhaps tablets - where appropriate. Traditional computer labs no longer serve an active, and creative purpose in today's modern educational settings. Students and staff need to, and should, be able to create wherever they are - in libraries, flex spaces, classrooms, hallways, and even courtyards outside - without the restrictions of hardwired desktops in rooms with no windows.

We need to begin thinking differently, moving our learning environment toward one that matches the real world, where creative and productive outlets are all around, and collaboration can flourish at a moment's notice.

TECHNOLOGY COACHES

In order to build capacity, and sustain long-term change and improvement, it is of vital importance to increase our capacity for teacher support in the form of technology coaches throughout the district.

One technology coach per building is an optimal goal.

However, leading up to peak levels, developing and acquiring even one additional district resource will be crucial in our district's success. Technology coaches work hand in hand with teachers and students, implementing and supporting technology projects, online testing, etc.

Technology coaches are full-time, fully dedicated to the mission of the district.

OPTIMIZATION

Over the next few years, we'll need to work hard at optimizing from a systems approach, where we openly, and aggressively examine all levels of operations around the district in order to limit wasted efforts, sub-optimal workflows, and outdated policies and procedures.

We need to update current policy to match our efforts, and communicate our progress to all stakeholders appropriately.

**"THE DINOSAURS DISAPPEARED BECAUSE
THEY COULD NOT ADAPT TO THEIR CHANGING
ENVIRONMENT."**

- ARTHUR C. CLARKE