a new essential curriculum for a new time

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Our essential questions:

How can we prepare our learners for their future?

Who owns the learning?

What do we cut?
What do we keep?
What do we create?

What year are you preparing your learners for?

1991?
1972?
2025?

Amend your mission statement

Class of 2026- this year’s preschool

Are children and youth processing information differently?
Resistance to GROWTH
- The myth of the good old days
- Bring back papyrus
- The secret in lesson planning is.....

LAMINATION
- The separation of Tech and Curriculum
- Globalization is “enrichment” vs. a necessity

Perhaps...the myth is that there is resistance!


It is official- there is evidence
There is a movement
Beyond Reform to New Forms

One of the most important new forms is PERSONALIZING the GLOBAL

We are using 21st century tools to Navigate teaching and learning.

Abundant web resources for teachers and administrators: NO EXCUSES
Global Learning Communities - NINGS – “exporting and importing” curriculum units and resources

Revising dated Standards, Mission Statements, and the Nature of School
- Between states & provinces
- Between nations
- CSCNEPA from Australia
- New Jersey, West Virginia, Wisconsin, Utah, RI
- CCSSO - New National Standards
- SOCIAL NETWORKS – Nings

Australia-National Education Professional Associations

GTAUN Cyber School Bus

NINGS

Oklahoma Curriculum 21

Developing a National Cyber School Curriculum in Australia

A New Path to Student Achievement

CTAUN Cyber School Bus
So....what do we do at our school?

**SCIENCE and MATH**

- What content, information, background, and context will our students need to become 21st century scientists and mathematicians?

- What skills will they need?

- What assessments can we design to see if they are acquiring the content and demonstrating the skill?

- What contemporary issues do we deem essential for their work?

**New Kind of Learners Need a New Kind of Classroom: NEW ROLES**

5th & 8th graders are eagerly anticipating a Skype call with Andrew Evans who traveled by bus from the USA to Antarctica (Sponsored by National Geographic) by Silvia Tolisano

**CURRICULUM 21 TEAMS**

- preparing our learners for their future....

  - What to cut?
  - What to keep?
  - What to create?

**Curriculum 21 TEAMS**

- provocation, invigoration, and replacement
Curriculum Designers, Inc.

2011

NEW ROLES

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VLM: Virtual Learning Magnets

The Virtual Learning Magnet for Space Science and Mathematics: Proof of Concept

The Council of Chief State School Officers (CCSSO) is engaged in Proof of Concept for a Virtual Learning Magnet in Space Science and Mathematics. This new approach to the delivery of education is designed to enhance learning of concepts and skills in science, mathematics, and technology for K-12 students. The goal is to improve students’ STEM literacy, understanding, and motivation to pursue STEM careers.

Global Educators Online

GEO Global Educators Online

Welcome to GEO - Global Educators Online

Schools around the world are using GEO Global Educators Online to learn more about the world through a series of multimedia lessons, webinars, and discussions with experts.

FIVE TYPES OF ALIGNMENT

- Internal: The elements in a teacher or district curriculum map align to one another.
- Cumulative: The curriculum maps build year to year; class to class K-12 and beyond.
- External: Curriculum and assessment maps align to external standards geared toward future productivity.
- To Students: Curriculum and assessment maps are designed to match the needs of specific learners in specific locations for their future.
- Global: The aims and actions of our school curriculum and programs will help our learners connect to global communities.

New Kind of Learners Need a New Kind of Classroom: NEW ROLES

Curriculum Design Requires Us to Make Choices about What Is Essential Now to Help Our Learners for Their Future.

Learners create and share knowledge differently from previous generations.
Two Tier Model for Curriculum 21 Teams

- **SHORT TERM- UPGRADES**: “revision and replacement” of dated curriculum and assessment types with more vital contemporary forms.

- **LONG TERM- VERSIONING** to new versions of the program structures in our school institutions that house curriculum and instruction.

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**VERSIONING**

- reviving for the long term
- Four KEY...SCHOOL STRUCTURES:
  - **SCHEDULE**: short term and long term
  - **STUDENT GROUPING PATTERNS**
  - **TEACHER CONFIGURATIONS**
  - **SPACE**: both physical and virtual

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**What are the basic elements in designing curriculum that need upgrading?**

- Content
- Skills
- Assessments

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**Upgrading Maps for Learner Engagement**

- Screenplays
- teleplays
- Podcasts
- broadcasts
- Documentaries
- email
- The SKYPE
- grandmothers
- self publishing
- facebook pages of historical figures
- text messaging as notetaking
- Trailer for upcoming unit

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**Engaging Learners in self-assessment: The Digital Portfolio**

- Richer Picture software from Ideas Consulting
- David Niguidula, david@ideasconsulting.com
- Rhode Island – Graduation by Proficiency
  - class of 2008
  - students will demonstrate mastery through portfolio, senior project, certificate of initial mastery
  - www.richerpicture.com

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Olivia personalizes the Global

OLIVIA’s Performance Based Global Assessment

★ Student developed world wide news service

What YEAR is reflected in your current PD delivery systems?

★ Is it the “PULSE TEST” for in-service credit?
★ Do you meet by habit or purpose?
★ Is there differentiated pd?
★ Do all of your faculty and administrators participate in global networks?

Replace dated PD practices with new ones

Upgrading applies to the all of us as professionals as well…
A recent example of personalizing the global in our PD...

**THE IBSC Keynote Challenge**

**Revising and upgrading skills in the curriculum:**
- Digital Literacy
- Global Literacy
- Media Literacy
- Cultural Literacy

**Planting lifelong capacity:**
- Digital Literacy
- Global Literacy
- Media Literacy
- Cultural Literacy

**Expansion of Literacy:**
**Media Criticism/ Media Invasion/Media Making**

- **Unit: Effects of TV on Me**
- Formal media criticism begins grade 4
- Television/film writing and production
- Documentary studies
- Web based national/international anthologies of children’s stories and observations (RTW)
- Teaching students to conduct video conferences
- TV critiques pre K-grade 3
- **Current Communications Benchmark**

**MEDIA LITERACY in Common Core**

**Web 2.0 - Strategic Interactive Instruction**

- Interactive
- Replacement
- Skill reinforcing
- “De-gimmick-ification”

**www.visualthesaurus.com**
De-gimmickification of Web 2.0 tools

www.wordle.net

A new habit for meetings....

Google Wonder Wheels

www.curriculum21.com
- Clearinghouse
- Instructionally targeted

+ With your Curriculum 21 Team take a specific web 2.0 application or tool and brainstorm practical instructional uses-

Essential = from the Latin esse; meaning to be; to distill to the core

UPGRADING CONTENT
Recast content for interdisciplinary issues **timeliness:**

- Breakthroughs
- Contemporary issues
- International perspectives
- Modern forms of expression

...A deliberate need to replace and to shed dated curriculum.

**Interdisciplinary Issues and Themes**

- **Sustainability** = [www.facingthefuture.org](http://www.facingthefuture.org)
- **Urban Planning: Gateway Cities** = [www.streetsteducation.org](http://www.streetsteducation.org)
- **Global Ambassadors** = [www.oecd.org](http://www.oecd.org);
- **Lifelong Fitness** = [http://www.focusedfitness.org/](http://www.focusedfitness.org/)
- **Financial Literacy** = [http://fffl.councilforeconed.org/](http://fffl.councilforeconed.org/)

**Sustainability**

Gateway Cities: Changing Roots

**GATEWAY CITIES**

National Geographic - Earthpulse

Rising Dominance of Cities

Global warming. Overfishing. Insecticide and other pollutants poison rivers. Can you imagine a world where all the rivers are dry?...
Livable streets and villages

Lifelong Physical and Mental Health: Nutrition, Fitness, Wellbeing

Viable Work and Financial Literacy: Personal and Global
WHAT TO CUT?
WHAT TO KEEP?
WHAT TO CREATE?

TIMELY AND TIMELESS

The New Social Studies: Geography focus on geo-politics and geo-economics
- State dept. figures: 10% hold passports/7% of those use them
- Eliminate the UNIT approach
- World geography by shape and name- early childhood
  - New constant for upper school:
  - The 50 Years
- The World Wide Workshop
- Gateway Cities
- Links to geo-economics: Five Emerging Economies
- Links to geo-politics in middle school
- Maps in every classroom: Down with Mercator
Elevate composition in the ARTS

- Expressive experiences:
  - Studio
  - Digital composition
  - Dance Performance
  - Original plays

Cultural Literacy:秸秆
- Active work with local institutions
- Carnegie Hall - Link-up
- Metropolitan Museum of Art
- Active engagement with national and international institutions
- ARTS EDGE
- Integration with curriculum

Rethinking Mathematics

- Financial literacy - new global markets; personal investment
- Demographics on work; world migration patterns
- Applied engineering with physics
- Eliminating snapshot mathematics in pre-K through grade 3
- Language arts daily speech and writing activity describing procedures and concepts
- FOCUS on translation strategies; post-its on math pages
- Self-tutorials using computers for homework and practice

Science

- International Science requirement
- Physics linked with math - elementary through high school
- Astronomy in terms of future directions
- Bio-ethics
- Bio-chemical abuses/Weapons
- Disease - pandemics
- Prevention and research focus
- Independent Science Research - NY

Update English Language Arts

- Expansive genre studies K-12
- Classics and new voices
- Studying screenplays and teleplays
- Poetry SLAMS
- Memorization of classic work
- Critiques of electronic media

Teaching world languages

- Minimal state requirements
- Increase commonly spoken world languages
- Increase range of specialized schools/magnets for students with linguistic talent
- Increased range of languages
- Begin at earlier age

From the CIA

World Fact Book:

- Languages:
  - Chinese, Mandarin 14.37%, Hindi 6.03%, English 5.61%, Spanish 5.59%, Bengali 3.41%, Portuguese 2.63%, Russian 2.75%, Japanese 2.06%, German, Standard 1.64%, Korean 1.28%, French 1.27% (2000 est.)
  - Note: percents are for “first language” speakers only
Health and Physical Ed

- Lifelong Fitness
- Personal health emphasis
- Nutrition
- Self-monitoring
- Pace of performance for individual student
- Cultivating personal preferences in sport
- Exposure to specific sports
- Yoga and meditation

Social and Mental Health
- Team participation and collaboration
- Global sports
- Wellness in all areas of life
- Substance Abuse prevention
- Dealing with emotional stress

A 21st Century Pledge:
A Curricular Commitment from Each Teacher

21st Century tools BENEFIT the learner

- Provides a visual and organizational tool that enables them to make meaning in “concrete” ways that they can also control with immediate access.
- Develops a different kind of “thinking tool”; the use of technology helps them develop their critical thinking in far more different ways
  - Make choices and selections more efficiently
  - Highly visual profile stimulates visual reflection
  - Develops their verbal expression in response to visual stimuli; less hesitation when visual is first in contrast to processing verbal/linguistic approaches, (for specific groups of students)
  - Increases engagement because of immediate excitement, control, and interactivity.
  - Transfer of engagement and interaction can flood into other aspects of the curriculum, especially when deliberately planned by the teacher.
  - Increases classroom teaching and learning time when intrusive routines can be minimized.
  - Increases likelihood of completion of academic work during out of school time.

What the commitment is not:

- The limited and immediate use of a technological tool
  - Using an LCD projector vs overhead
  - Using a computer vs typewriter
  - Using smart board vs LCD projector

The commitment is:

- An integrated use of technology that enhances content
- An application to a specific unit of study
- Evidenced directly in student products and performances

Each teacher--

- Reviews all current available technological resources in district
  - Online resources: video streaming; internet websites and subscriptions; webquest creation; webcasting through laptop
  - Hardware resources: video conferencing; laptop labs; digital cameras; Digital Recording Studio
  - Creative software: MovieMaker; MediaPlayer; Video clips via digital cameras
Each teacher commits to:
- Identifying at least ONE specific unit to revise.
- Planning to replace a specific content, skill, and assessment practice with a 21st Century UPGRADE within the UNIT.
- Sharing the proposed change with colleagues.
- Learning to use the tool that will be requisite to replace the current unit design with the new practice.
- Revising the UNIT and begins implementation with students.
- Tolerating a certain degree of frustration
- Celebrating the victories.
- Reviewing and sharing of 21st Century learning openly with colleagues at targeted work-sessions through the school year.

Administrators commit to:
- Reviews, monitors, and provides FEEDBACK to teachers on individual curricular pledges to UPDATE.
- Identifying at least ONE specific staff development or administrative task to revise.
- Planning to replace a specific content, skill, and assessment practice with a 21st Century UPGRADE for each administrative.
- Sharing the proposed change with colleagues.
- Learning to use the tool that will be requisite to replace the current unit design with the new practice.
- Revising the task and begins implementation with teachers.
- Tolerating a certain degree of frustration
- Celebrating the victories.
- Reviewing and sharing of 21st Century learning openly with colleagues at targeted work-sessions through the school year.

Strategic Grouping for Professional Reviews
- **Vertical – K-12**: extended departmental meetings
- **Targeted Vertical** examples: K-1; 3-6; 7-11; 10-12
- **Across grade level**: all third grade; all teachers of freshmen
- **Targeted cross grade level**: interdisciplinary 7th grade team
- **Extended team**: special area teachers, special ed staff, ESL
- **Feeder pattern**: in larger districts only those sharing same students; within school following student groups
- **Expanded local team**: virtual groupings (online); parents; community; internships
- **Global team**: Feedback and collaboration, with meaningful worldwide educators and students.

Accept and work with VIRTUAL time
- Possibilities of work with time and space issues.
Technology allows us to work at our own time and pace:
- Consider email
- Curriculum mapping
- Video conferencing
- Electronic field trips
- Electronic office hours
- Global experience learning

NEW SCHOOL VERSIONS

VERSIONING - revising for the long term
Four KEY...SCHOOL STRUCTURES:
- SCHEDULE - short term and long term
- STUDENT GROUPING PATTERNS
- TEACHER CONFIGURATIONS
- SPACE - both physical and virtual

The Schedule is Curricular Destiny
- long term schedules
- daily instructional time
- extended day patterns
- DAILY PLANNING TIME

NEEDED: Length of Year: 195-205 days

VIRTUAL LEARNING MAGNET (VLM)
- Virtual Learning Magnet for Science and Mathematics: Proof of Concept
- The Virtual Learning Magnet for Science and Mathematics program is a pilot intended to encourage, demonstrate, and disseminate best practices for instruction and assessment in science and mathematics. The program is designed to provide a range of instructional tools, strategies, assessment methodologies, and professional development opportunities to support educators in implementing effective instructional strategies.

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**Long Term Schedules**

- Rethink our grade 12 compulsion.
- Early graduation when ready
- Additional year if necessary
- **SUMMER SEMESTER:** extended Senior Year and Early Graduation
- Replace seat time with task completion that might be accomplished virtually
- Off school time frames

**Rethink Daily use of Time**

- **START TIME:** Minnesota start time study
- **SEMINARS vs. classes**
- **STUDY groups on-going**
- **BLOCKS:** Rotational blocks in conjunction with set blocks
  - Every four weeks—expanded block for projects/site visits/community work
  - Homework blocks
- **LENGTH OF DAY:**
  - Staggered day: Why the same length each day?
- **BOOKEND SCHEDULES:** sports/arts/extra-curricular
- **NIGHT CLASSES**
- **VIRTUAL TIME**—managing online experiences

**Off campus time**

- Online experiences as an integrated and regular part of time frames
- Work on time budgeting
- Use of online experiences
- Significant breakthroughs with ‘streaming’
- Ongoing work with businesses/social institutions/arts institutions
- **HOMEWORK as HOMESCHOOLING**
  - **TUTORING CLUSTERS** in local school or neighborhood setting

**Daily Planning Time**

- **Regular cross-grade level work**
  - Especially necessary in high school regarding language capacity building
  - Across ninth and tenth grade—at least twice a semester
- **Regular vertical team planning**
  - Especially necessary in elementary school
  - Between post-secondary institutions
- **Curriculum Mapping** makes this possible electronically

**Common Planning Time through Year**

- **SIX BENCHMARK REVIEWS** per year
- Professional DAYS—focused directly building based student performance data
Fundamental student grouping issues

Grouping students

- Replacing “ability” groups which focus on child-label
- Focus on skills grouping
- Long term grouping/looping clusters
- Middle School Vertical Teams or Looped Teams
- High School: rethink lower and upper classmen models/ Writing Mentor model
- Dignity to school to work/ Vocational Education
- Early graduation/ Extra year

Grouping students by skills

- Replacing “ability” groups which focus on child-label
- Focus on skills grouping

Homogenous vs. Heterogeneous grouping

- What about intelligent grouping?
- Examples from diagnostic short term/long term skills grouping

Primary age children

- Developmental grouping around age spans vs. strict grade level grouping
- Long term grouping/looping clusters
- Working with pre-school educators
- Formal work with children and parent groups to support literacy

Middle School

- Team models
  - Small group academic advisories
- Vertical teams
- Affective grouping
  - Character Education Seminars
- Independent long term project outside of school
Australia

Teacher configurations: the need for Multiple Affiliations

- Partners between building
- Collaboration within building
- Global co-teaching and sharing

High School Level

- Recognizing the difference between the needs of adolescent learners in current 9th and 10th and 11th and 12th grade learners.
- Grouping around fundamental literacy skill needs/ independent study skill needs
- Curricular options for pre-adult learners based on motivation, aspiration, and post-secondary next steps Writing Mentor model
- Early graduation/additional year
- SCIENCE research labs
- OFF campus requirements
- Seminar groups to monitor
- Dignity to school to work
- Vocational Education
  - All students have some experience
  - Life and work skill academies
  - Should all learners be college bound?

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Elementary Vertical grouping

- Vertical teams K-5
  - Operationalizing Learning Communities

- Meeting virtually via Curriculum Mapping Technology

Middle school configurations

- All middle school personnel should be part of several teams:
  - Grade level/age level team
  - Vertical team within building
  - Vertical BRIDGE team either between middle and elementary OR middle and high school
Rethinking high school teacher configurations

- Horizontal patterns 9th and 10th grade
  - Allows for cross-disciplinary focus on language capacity building
  - Reading, writing, speaking, listening strategies
- Mentor to senior interns or community project groups
- Advisor to students employing online courses
- Facilitator using video conferencing tools
- Teacher/facilitator to evening community issues presentations presented by students

International Award Winning School Architecture

www.DESIGNSHARE.com

Ingunnarsskoli School Reykjavik, Iceland

Eureka School Walodai Village, India

Rethinking interior spaces http://www.designshare.com