These 21st century kids will hit the work force in **2029**

Purposes of Think Tank

- **Response to concerns expressed by staff of trying to fit everything in (schedule is so tight, greater flexibility)**
- **Meet the needs of *all* learners**
- **Meet the demands of the rigor of the common core**
- **Global competitiveness**
- **D41 survey results**
- **Embed STEAM (Science, Technology, Engineering, Mathematics + Arts = STEAM)**

- http://youtu.be/zDZFcDGpL4U

Setting the Context

- District 41's Visioning process in 2007 established the importance of preparing children to thrive in a global society
- Children in the US are losing ground to students in other countries, especially in science.
- A desire to create more individualized learning opportunities for children

Setting the Context Continued

Our Vision

Ignite passion. Inspire excellence. Imagine possibilities.

Our Mission

We embrace the future with optimism, working in partnership with our community on behalf of our children. We develop intellect, engage creativity, foster responsibility, and build positive and collaborative relationships to enable all children to thrive in a changing and increasingly global society.

Our Positive Core

We make a difference.

We embrace change together.

We are a true team of professionals.

We build the future.

Our Learner Characteristics

Glen Ellyn School District 41

What is 21st century learning? 21st century learning is the constellation of learner characteristics which equips students to enjoy a high quality of life, work and relationships by being resilient, intentional, creative and confident learners who understand the value of collaboration, the relationship of effort to results and the need to be continually growing and learning.

Habits and Attitudes:
a person with these habits and attitudes is someone who is…

- Curious
- Creative
- Resilient in the face of challenges
- Able to embrace change
- Adaptable
- Collaborative
- Open to diverse viewpoints and experiences
- Respectful of others
- Respectful of the environment
- Compassionate
- Optimistic
- Nurturing
- Challenge seeking
- Engaged and enthusiastic
- Future oriented with a global perspective
- Intrinsically motivated

Skills and Applications:
a person with these skills and applications is someone who can…

- Solve complex problems
- Make connections between present and future opportunities
- Think critically, reflectively
- Communicate effectively using a variety of media and technology
- Communicate effectively to a variety of audiences
- Utilize multiple literacy skills in learning
- Utilize organizational skills to enhance learning
- Mediate conflict peacefully
- Pursue a healthy lifestyle
- Appreciate beauty and the arts
- Advocate for oneself and others
- Apply current learning to new situations
- Synthesize multiple pieces of information to create new information
- Assume responsibility for learning

Process

Long-range Plan creates 2-year transformative action plan

Open Invitation to teachers, parents and administrators – Fall 2011 to join Think Tank

Exploration Phase: School year and summer of 2012 – Fall 2012 (Renewed Invitation to teachers, administrators and parents in spring 2012)

Planning Phase: Current and throughout the current school year

Implementation Phase: Beginning in school year 2013 –a three year implementation was envisioned.

Work of the Think Tank

- Met regularly during the 2011/2012 school year. Meeting weekly during the 2012/2013 school year.
- Work grounded in the Learner Characteristics which reflect 21st century learning skills
- Reviewed the research
- Videos
- Guest speakers
- Conferences, workshops
- Site visits
- Sub group work
- Reflecting on feedback

Think Tank – Who and What

- 66 members (49 on Think Tank/17 on TT Parent Advisory)
- To better prepare our children for their future, we want to create schools where:
    1. Every child has what they need when they need it
    2. The school day is divided into two main blocks: literacy/social studies and math/science with the possibility of mixed grade groups (no child will receive instruction below his or her grade level but may receive instruction above grade level)
    3. The school day will be developmentally appropriate and nurturing with a sustained emphasis on social-emotional factors and student ownership in their learning

Research Highlights

The Global Achievement Gap (Tony Wagner)

The Global Achievement Gap is the gap between what even our best schools are teaching and testing vs. the skills ALL students will need for careers, college and citizenship in the 21st century.

We are preparing our students for jobs that do not yet exist.

The "NET GENERATION" is motivated differently to learn

The NEW PROBLEM: How to create an "Innovation Nation?"

The culture of learning Vs. the culture of innovation

- Individual achievement vs. collaboration
- Specialization vs. multi-disciplinary learning
- Risk avoidance vs. trial and error
- Consuming vs. creating
- Extrinsic vs. intrinsic motivation
- Play, passion and purpose

Research Highlights Continued

Curriculum 21: Essential Education for a Changing World" by Heidi Hayes Jacobs

What year are we preparing our students for?

We have 21st century children

We are currently using curricula from the 1990's. (20th century curriculum)

Our schedule was developed in 1896 (180 days, agrarian, 6-hour day, 8 subjects)- (19th century schedule)

Children and youth process information differently than we do

What we need

Curricula must be constantly updated

Tools must be supportive

Essential questions we should be asking ourselves

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?

Research Highlights Continued

5 Minds for the Future by Howard Gardner

- Disciplined Mind (Depth)
- Synthesizing Mind (Breadth)
- Creative Mind (Stretch)
- Respectful Mind
- Ethical Mind

The Future of Learning - 4 Mega Trends

Globalization – increasing connections between world nations

Biological revolution – cloning, genetic engineering

Digital revolution – multi-user games, social networking, Internet resources, twitter

Lifelong learning – education is not K-12 or K-16. Professionals need to continue learning

What the research tells us

Developmental grouping around age spans vs. strict grade level grouping

Variable grouping structures

Personalized learning

Relevant curriculum

Student engagement

What we should be teaching for:

- Fluidity with technology
- Asking the right questions
- Synthesizing and integrating
- Creating
- Interpersonal skills
- Adaptability
- Resilience

What is STEAM?

Science

Technology

Engineering

The arts (art, music, physical education)

Mathematics

Using math and technology to teach science and engineering.

Students will experience the arts as both stand-alone classes and infused within STEAM. The Arts can also be infused within the literacy classes.

Student Groupings K/1 (no significant changes)

Kindergarten

Focus on literacy and math

Explore Targeted Learning Time with 1st grade beginning second trimester

Grade 1

- Two large blocks of time for literacy/social studies, math and science
- Explore TLT and multi-age learning beginning second trimester
- Continue building Project Based Learning units of study

Student Groupings – 2/3 & 4/5

- Students receive grade-level instruction
- Students begin their day in a homeroom – focus on the Learner Characteristics (request that they connect with this teacher at the end of the day as well)
- Teachers specialize in either literacy/social studies or Math/STEAM
- Social studies/literacy modules are rotated on a 2-year basis
- Math instruction at grade level and above – students most often grouped with grade level peers (standards approach)
- Gifted Math (AEC) remains a pull-out

Movement in a Student's Day

*Literacy/SS Block switched with Math/Science

Current	**Proposed**
Literacy/SS Block	Literacy/SS Block - homeroom
TLT Time	PE
Specials (art, music, LLC or PE)	WIN – What I Need
Lunch	Lunch
Math Block	Math/Science (STEAM) Block
Science	Art/music
Specials (art, music, LLC or PE)	WIN – What I Need

What the day would look like for a student (in general terms)

*Teachers specialize in content instruction

Literacy/Social Studies Block

•Grades 2 & 3 - 4 & 5

•Over the course of 2 years, students would experience 8 different integrated literacy modules.

Math/Science (STEAM) Block

•Grade level math content or above

•2013/2014 **current** grade level science curriculum with their math teacher

•2014/2015 new STEAM curriculum

Sample Student Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Homeroom	Homeroom	Homeroom	Homeroom	Homeroom
STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)
Art or Music	STEAM Continued (math/science)	STEAM Continued (math/science)	STEAM Continued (math/science)	STEAM Continued (math/science)
STEAM Continued (math/science)	Art or Music	STEAM Continued (math/science)	Art or Music	STEAM Continued (math/science)
WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science
Lunch/Recess	Lunch/Recess	Lunch/Recess	Lunch/Recess	Lunch/Recess
Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies
PE	PE	PE	PE	PE
Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued
WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy
Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)

Sample Literacy Teacher Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Homeroom	Homeroom	Homeroom	Homeroom	Homeroom
Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies
PE	PE	PE	PE	PE
Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued
WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy
Lunch	Lunch	Lunch	Lunch	Lunch
Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies	Literacy/Social Studies
PE	PE	PE	PE	PE
Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued	Literacy/Social Studies Continued
WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy	WIN in literacy
Homeroom (opportunity to check back in with your morning students)	Homeroom (opportunity to check back in with your morning students)	Homeroom (opportunity to check back in with your morning students)	Homeroom (opportunity to check back in with your morning students)	Homeroom (opportunity to check back in with y our morning students)
Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)

Sample STEAM Teacher Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Homeroom	Homeroom	Homeroom	Homeroom	Homeroom
STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)
Art or Music	STEAM Continued (math/science)	STEAM Continued (math/science)	STEAM Continued (math/science)	STEAM Continued (math/science)
STEAM Continued (math/science)	Art or Music	STEAM Continued (math/science)	Art or Music	STEAM Continued (math/science)
WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science
Lunch/Recess	Lunch/Recess	Lunch/Recess	Lunch/Recess	Lunch/Recess
STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)	STEAM (math/science)
Art or Music	STEAM Continued (math/science)	STEAM Continued (math/science)	STEAM Continued (math/science)	Art or Music
STEAM Continued (math/science)	STEAM Continued (math/science)	Art or Music	STEAM Continued (math/science)	STEAM Continued (math/science)
WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science	WIN in math and/or science
Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with their morning teacher)	Homeroom (opportunity to check back in with t heir morning teacher)
Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)	Common PLC Time (predetermined monthly schedule)

General Questions

- Why do this with some leadership changes?
- What about Foreign Language?
- What about ESL time?
- What about students with an IEP?
- What do I do during WIN time?
- What about individual plan time?
- Student placement?
- Will the school day change?
- Teacher specialization – what and when?

Professional Learning Community

- Continue the practice of preserving PLC time for staff during the work day while increasing the collaborative opportunities across all teaching areas: Special Education, ELL, specials
- Opportunities to meet cross district with job alike teams
- Time to meet with specialists
- Incorporate staff meetings as a time for further collaboration

Facilities

- Arrange sections of the building by literacy and math, except in kindergarten and first grade or by grade level bands (K/1; 2/3; 4/5)
- Identify rooms to serve as STEAM, literacy and math labs (building decision)
- Decentralize technology

Evaluating the Implementation

Identify a list of what needs to be evaluated each year. Identify or create actual tools (i.e. checklists, surveys) to use as part of the evaluation process.

Look at the following three areas to evaluate: Fidelity; Impact; Satisfaction

Fidelity – did the change stay true to recommendations

Impact – how have the changes affected students, teachers, and parents (both anticipated and unanticipated)

Satisfaction – are students, teachers and parents satisfied with the changes?

Additional plan specifics that will be furthered developed:

- Opportunity in May for staff and students to experience final Think Tank implementation plan
- Meet and Greet
- Curriculum Night
- Parent/Teacher Conferences
- Pinnacle
- Students supplies/materials
- Homeroom
- Open House

Themes that have emerged:

- We are fine as we are. Our scores are good, our teachers are talented, our kids are fine. Don't mess with success.
- Slow down. Apart from the value of the ideas one way or another, the community needs more time to become familiar with the concepts and the rationale, and the schools need more time and training to prepare. Consider piloting first so that the concepts have a better chance to succeed.
- This is just what we need. We can't sit still but must continue to improve. The ideas make sense and have worked elsewhere.
- Don't wait…waiting will make change harder and more time will pass before our children benefit from the proposals.
- The ideas are wrong for our district. Most of the objections in this category are about grouping students differently, a fear that children will end up labeled as a certain type of learner or that children will not be able to handle additional transitions in their day.
- Teacher specialization will benefit instruction for children.

Themes Continued:

- Concerns and questions about our at-risk learners, whether they are special education students, learning the English language or simply struggling either academically or socially.
- Parents want to hear what teachers think, and be assured that most of them support these ideas.
- STEAM sounds good. Strengthening our science program and using an integrated approach makes sense.
- Don't overlook the "whole" child in a quest for academic achievement. The social-emotional connections a child forms at school are key to his or her success.
- The New Common Core (academic standards for learning) is a game-changer and we have to rise to its demands.
- How will children be placed in classes? How will that differ from today's process?
- Take it further. What about a totally ungraded system where children can really move at their own pace. The proposals do not go far enough to give able students the scope they need to really fly.
- We need all-day kindergarten for the future success of our children. Why not group K/1 as well?
- I need to learn more. I'm not sure how I feel until I get a better understanding of the Think Tank concepts.

Think Tank to address

- Piloting (what and where)
- Multiage
- Teacher Specialization
- STEAM labs
- Literacy/math labs
- Social/emotional needs
- Transitions (including moving kids safely through the building)
- Survey to determine staff readiness at each school
- Will we need an appeals process if we have leveled math
- Activities that are grade specific
- Odd number of sections

Next Steps

- Think Tank meetings process questions, feedback and suggestions from staff and parents
- Parent meetings on January 16 & January 23
- Informal building-based meetings with staff and parents
- Continue Parent Advisory Meetings
- Staff survey
- Share results of Think Tank meetings with staff and parents
- Continued development of plan specifics
- Identify technology needs
- Teachers in grades 2 – 5 would identify area of preferred specialization
- Work with PDT to provide professional development beginning in the 2012/2013 school year and beyond
- Board presentation on 2/25/13