



Leicester Middle School Educational Working Group

Visioning Workshop One

January 29, 2019

Agenda

EXPECTED OUTCOMES: By the end of the session we will have begun to...

- Share **Priority Goals** for Leicester Public School's master planning process and the design of the renovated and/or new Leicester Middle School
- Discuss 21st century teaching and learning strategies and identify **21st Century Learning Goals** as connected to current and future best-practices within LPS's K-12 schools
- Assess Leicester Public School's **Strengths, Challenges, Opportunities, and Goals** with regard to the development of its academic programs and school facilities
- Share **Visions for the Future** evolution and growth of the LPS K-8 schools

Time	Activity	Purpose
4:00 – 4:45	Workshop Goals and Introductions <ul style="list-style-type: none"> • Workshop overview • The Design Process / Creating a Design Guide • Introductions <ul style="list-style-type: none"> ○ Priority Goals for the elementary school planning process 	Introduce participants and clarify agenda and desired outcomes for this workshop. Share some of our priority goals for Leicester Public School's K-12 planning process.
4:45 – 6:00	21st Century Schools and Learning Goals <ul style="list-style-type: none"> • Interactive Presentation: 21st Century Teaching and Learning • Videos and discussion • Small group review of assorted 21st century learning goals and outcomes and creation of priority listings • Large group prioritization 	<p>Identify and discuss elements of 21st century teaching and learning as connected to Leicester Public School's approach to its educational programming.</p> <p>Ground our thinking about design guidelines and desired building features in a discussion and exploration of 21st century learning goals for Leicester Public School's K-12 school programming.</p>



6:00 – 6:30	Dinner	
6:30 – 7:15	<i>LPS Present and Future Educational Priorities</i> <ul style="list-style-type: none"> Brief presentations of essential and innovative school programs and initiatives presently in practice within LPS and Leicester Middle School 	Identify present and future educational initiatives and programs within LPS K-12 schools and discuss their effect on the design of the new facility.
7:15 – 7:50	<i>Leicester Public Schools SCOG Analysis</i> <ul style="list-style-type: none"> Brainstorm of Leicester Public School's Strengths, Challenges, Opportunities, and Goals 	Identify what is presently working well within LPS, what is challenging, and what opportunities exist with regard to the further development of academic programs and the renovated and/or new school facility.
7:50 – 8:00	<i>Closing and Next Steps</i> <ul style="list-style-type: none"> Next Steps review and Q&A Envisioning the Future – Writing Prompt: <ul style="list-style-type: none"> Describe some of the ways in which you would like to see the LPS's K-12 schools change, grow and evolve over the next 5-10 years 	Hear from participants about their questions and thoughts. Review next steps for development of our process working together and share visions for the future of LPS's K-12 schools.



Exploring Learning Goals for the 21st Century

The following learning goals listings represent the attempts of a variety of thoughtful and successful schools, school networks, and educational organizations to identify the learning goals and skills that are most important for preparing today's students for success in life, work and post-secondary study. As you look through them, think about which 21st century learning goals you find most meaningful for your students and why.

Bloom's Taxonomy

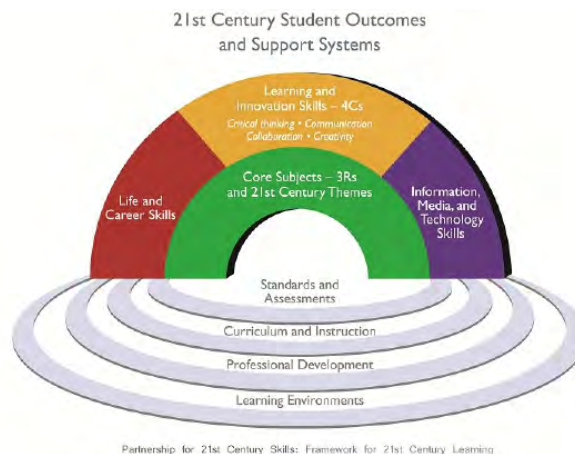
- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Partnership for 21st Century Skills

- Critical Thinking
- Communication
- Collaboration
- Creativity

NCREL - North Central Regional Education Laboratory

- Digital Age Literacy
 - Basic, scientific, economic and technological literacy
 - Visual literacy and information literacy
 - Multicultural literacy and global awareness
- Inventive Thinking
 - Adaptability and managing complexity
 - Self-direction
 - Curiosity, creativity, and risk taking
 - Higher-order thinking and sound reasoning
- Effective Communication
 - Teaming, collaboration and interpersonal skills
 - Self-direction
 - Personal, social, and civic responsibility
 - Interactive communication
- High Productivity
 - Prioritizing, planning and managing for results
 - Effective use of real world tools
 - Ability to produce relevant, high-quality products



Wagner: Seven 21st Century Skills

- Critical Thinking and problem solving
- Collaboration and leadership
- Agility and adaptability
- Initiative and entrepreneurship
- Effective written and oral communication
- Assessing and analyzing information
- Curiosity and imagination

New Tech Network

- Technology Literacy
- Citizenship and Ethics
- Critical Thinking
- Career Preparation
- Collaboration
- Written Communication
- Oral Communication
- Curricular Literacy

Coalition of Essential Schools Habits of Mind

- Perspective
- Analysis
- Imagination
- Empathy
- Communication
- Commitment
- Humility
- Joy

National Association for Independent Schools

- Analytical and creative thinking and problem solving
- Complex communication - oral and written
- Leadership and teamwork
- Digital and quantitative literacy
- Global perspective
- Adaptability, initiative and risk-taking
- Integrity and ethical decision making



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The MET Technical School

- Communication
 - How do I take in and express ideas?
- Empirical Reasoning
 - How do I prove it?
- Personal Qualities
 - What do I bring to this process?
- Quantitative Reasoning
 - How do I measure, compare, or represent it?
- Social Reasoning
 - What are other peoples perspectives on this?

Expeditionary Learning

- The primacy of self-discovery
- The having of wonderful ideas
- The responsibility for learning
- Empathy and caring
- Success and failure
- Collaboration and competition
- Diversity and inclusion
- The natural world
- Solitude and reflection
- Service and compassion

Deeper Learning Network/ EL Schools

- Mastery of Core Academic Content
- Critical Thinking and Problem Solving
- Collaboration
- Effective Communication
- Self-Directed Learning
- An "Academic Mindset"

21st Century Employability and College Prep Skills (CTE)

- Work in teams
- Ask good questions
- Consider multiple perspectives in the workplace
- Ask how things are connected
- Take big picture views

Key Competencies for Lifelong Learning

European Reference Framework

- Communication in the mother tongue
- Communication in foreign languages
- Mathematical competence
- Basic competences in science and technology
- Digital competence
- Learning to learn
- Social and civic competences
- Sense of initiative and entrepreneurship
- Cultural awareness and expression

The Four Pillars of Education UNESCO (1996)

- Learning to know
- Learning to do
- Learning to live together
- Learning to be

Pink: Skills for Whole Brain Thinking

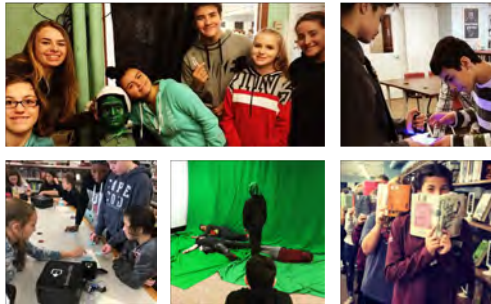
- Design
- Story
- Symphony
- Empathy
- Play

Howard Gardner 5 Minds

- Disciplined Mind
- Synthesizing Mind
- Creative Mind
- Respectful Mind
- Ethical Mind



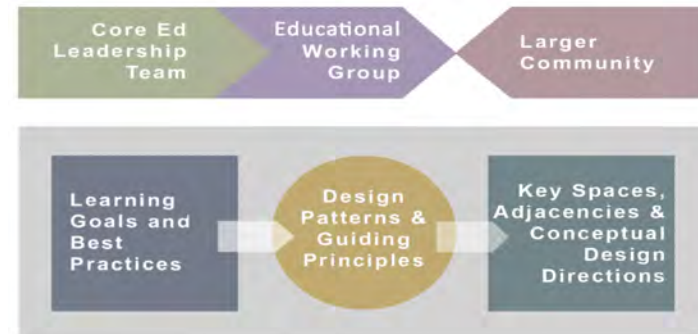
January 29, 2019



ENVISIONING THE NEW LEICESTER MIDDLE SCHOOL

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The Visioning Process



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Workshops



January 29

February 5

February 26

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Building Off Of

- Current Innovation Agenda and Programming
- School Improvement Plan
- **Future Search 2017**
- Other Sources



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Future Search 2017

April 2017 – 80 Participants

- Historical Scan
- “Prouds and Sorries” Activity
- Thought Exchange Survey

Common Themes for the Future

- Engaging instruction and effective interventions
- Staff training development
- Improve infrastructure and resources
- Attend to social emotional needs of students
- Teach healthy behaviors – physical and emotional



Building Off Of DRAFT Ed Plan

- Separate lower and upper schools with grade 4 transition
- K-3 / 4 transition / 5-6 / 7-8
- Centralized non-core spaces
- Grade level neighborhoods
- Collaboration area, neighborhood and school-wide
- Central project space
- Project areas in each classroom
- Guide on the side
- Morning meetings
- Grade level teams
- Interdisciplinary
- Extended learning areas
- Informal supervision
- Display
- Transparency when appropriate
- Outdoor spaces



Priorities
for LPS's academic programs and the
renovated and/or new facility



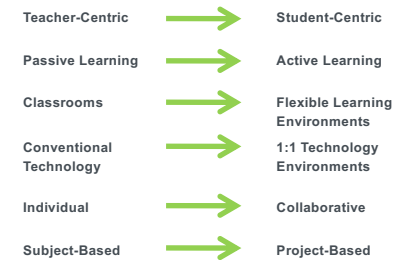
Future Ready
Learning

Focus on “Future Ready Skills”



Educational Delivery

Where are you now?
Where do you want to be?



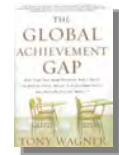
Focus on Learning AND Teaching

- High-Performance Work Environments
- Varied and Collaborative
- Lifelong Learning



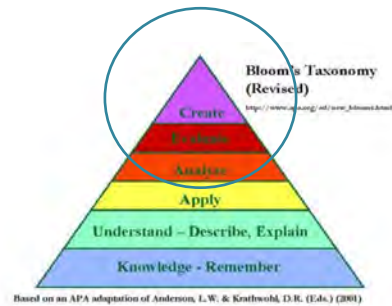
Focus on Doing not Knowing

The world no longer cares about how much you know, the world cares about what you can do with what you know – *Tony Wagner*



- Critical Thinking and Problem Solving
- Communication, oral and written
- Collaboration and Leadership
- Creativity, Curiosity and Imagination
- Accessing and Analyzing Information
- Initiative and Entrepreneurialism
- Agility and Adaptability

Bloom's Taxonomy (Revised)



Top 10 Skills for a New Economy

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility



Source: Future of Jobs Report, World Economic Forum

Social Emotional Learning



- Character education
- Growth Mindset
- Mental health
- Mindfulness
- Resilience and Grit
- Classroom management



6 Senses for the Conceptual Age From Daniel Pink's A Whole New Mind

1. Design
2. Story
3. Symphony
4. Empathy
5. Play
6. Meaning



*Asia,
Automation,
Affluence....*

Student-Centered Learning

- Agency
- Higher Order Thinking
- Proactive Learning
- Problem Solving
- Organizational Skills
- Communication
- Confidence



Lifelong Learners



International Baccalaureate (IB)

- Inquirers
- Knowledgeable
- Thinkers
- Communicators
- Principled
- Risk-Takers
- Balanced
- Reflective

Student Engagement

- | | | |
|-------------------------------|-----------------|---------------|
| ○ Common Intellectual Mission | ○ Relationships | ○ Exhibitions |
| ○ Community Meetings | ○ Relevance | ○ Display |



Push-In / Differentiated Instruction

- | | |
|---------------------|--------------------------------|
| ○ Co-Teaching | ○ Equity and Access |
| ○ Learning Stations | ○ Varied Modalities and Venues |



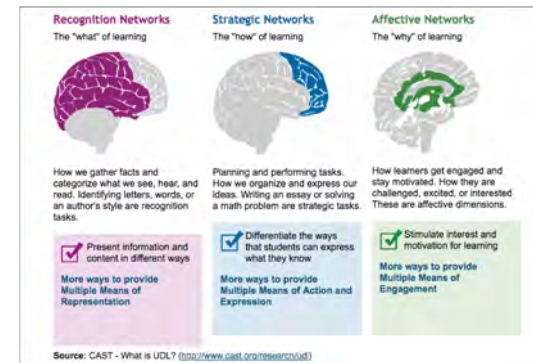
Differentiated Instruction

- Student Choice
- Self-Paced and Small Group
- Personalization
- Anywhere, anytime learning



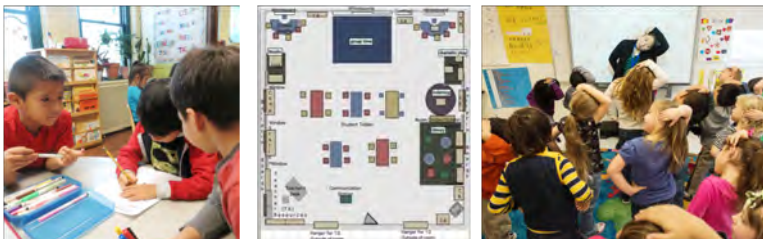
Universal Designs for Learning

- Principles for curriculum development
- Multiple means of:
 - Representation
 - Expression
 - Engagement
- Independent and small group work



Center-Based Instruction

- Materials for one type of subject grouped together
- Independent learning and exploration
- Child-accessible
- Hands-on and minds-on



Health and Wellness

- Movement
- Varied Contexts for Learning
- Indoor/Outdoor Play
- Fitness (i.e. Yoga)
- Outdoor Connections



Real World Connections

- Authentic Contexts
- Performance Assessment
- Product Creation



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Community Partnerships

- Permeable School Walls
- Adult-World Connections / Internships
- Leveraged Resources



Technology Integration

- Blended Learning 1:1
- Technology as a Tool
- Production of Technology and Information



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Blended Learning

- Seamless Technology Integration
- Online and Virtual Delivery
- Production of Technology and Information



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Anytime, Anywhere Learning

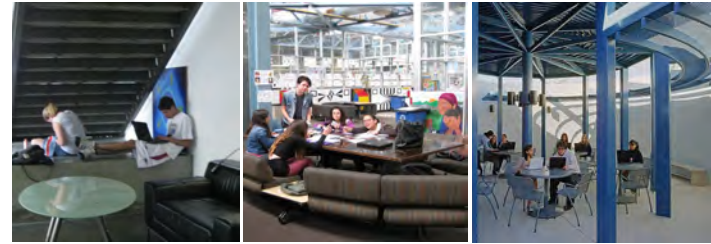
- Extended Learning Spaces and Times
- Self-Paced and Small Group
- Student Projects



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Anytime, Anywhere Learning

- Flip Classrooms
- MOOCs
- Virtual Delivery
- Gaming



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Hands-On Exploration

- Project-Based Learning
- Performance Assessment and Exhibition
- Product Creation and Display



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Project-Based and Deeper Learning

- Project and Problem-Based Learning
- Academic and Vocational Integration
- Community as Text
- Authentic Contexts
- Performance assessment
- Product creation



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Maker Thinking

- Makerspaces
- Robotics
- STEM and Steam
- Coding



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STEM and STEAM

- STEM as meta-discipline
- Art and Humanities as Glue
- Design Thinking Process



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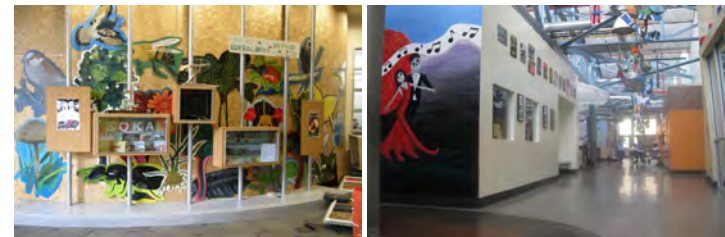
Next Gen Science Standards

Science Practices Next Generation Science Standards	Ask Questions	Investigate	Use Math	Communicate
	<ul style="list-style-type: none"> What am I observing? What does this evidence mean? What is the relationship between these variables? How can I make my model more accurate? What evidence do I need to answer my question? What hypothesis can I state based on my observations? Is the data used correctly in the argument? 	<ul style="list-style-type: none"> Use the Scientific Method State the goal of the investigation Predict outcomes Plan a course of action that will provide the most evidence to support conclusions Use scientific spaces to allow why data can be considered evidence Risk-taking error in procedures 	<ul style="list-style-type: none"> Use computers to analyze very large data sets for patterns and trends Use mathematical representations to support scientific conclusions Create algorithms (a series of ordered steps) to solve a problem Use digital laboratory tools to observe, measure, record, and process data Make quantitative predictions 	<ul style="list-style-type: none"> Be a critical consumer of information about science Critically read scientific texts to determine the central ideas and obtain scientific information to describe patterns in evidence Use multiple sources to obtain information used to evaluate the validity of claims and methods Communicate ideas by using tables, diagrams, graphs, models, interactive displays, and equations as well as orally in writing, and discussion
Design a Model	Analyze Data	Explain	Argue	
	<ul style="list-style-type: none"> Models include diagrams, physical replicas, mathematical representations, analogies, and computer simulations Models highlight some ideas and simplify others Models are used to help find questions and specific ways to get data to predict, and to learn Models are based upon evidence. New evidence changes the model 	<ul style="list-style-type: none"> Construct and interpret graphical displays of data Use computers to tabulate, graphically represent data, visualize, and statistically analyze Use math to represent relationships between variables and identify patterns Take into account sources of error In one variable the cause (control) or the both part happen at the same time (simultaneous) 	<ul style="list-style-type: none"> An explanation includes qualitative or quantitative relationships between variables that predict and select phenomena Design investigations that generate data to determine explanations to questions Apply scientific reasoning to show why the data or evidence is adequate for the explanation or claim Construct an explanation using evidence or representations 	

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Arts Integration

- Creative expression and communication
- Synthesis of disciplines
- Active and varied display venues
- Design and Maker Thinking



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After School Enrichment

- Drama
- Sports
- Robotics
- Art
- Coding
- Maker Thinking



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Global Connections

- International Collaborations
- Exchange Students
- MOU's with Foreign Countries



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Teaming and Collaboration

- Meaningful Integration of Disciplines
- Cohort Groupings / Reduced Student Load
- Teacher and Student Collaboration



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Common Core ELA Shifts

Common Core Shifts for English Language Arts/Literacy

1. **Regular practice with complex text and its academic language**
Rather than focusing solely on the skills of reading and writing, the Standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. The Standards build a staircase of text complexity so that all students are ready for the demands of college- and career-level reading no later than the end of high school. Choosing material to read complexity—and intricately connected to reading comprehension—is a focus on academic vocabulary words that appear in a variety of content areas (such as science and civics).
2. **Reading, writing and speaking grounded in evidence from text, both literary and informational**
The Standards place a premium on students writing to sources, i.e., using evidence from texts to present careful analysis, well-defended claims, and clear information. Rather than asking students questions they can answer solely from their prior knowledge or experience, the Standards expect students to answer questions that depend on their reading and the text in texts with care. The Standards also require the cultivation of creative writing throughout the grades, and in later grades a command of sequence and detail will be essential for effective argumentative and informational writing.

Likewise, the reading standards focus on students' ability to read carefully and grasp information, arguments, ideas and details based on text evidence. Students should be able to answer a range of text-dependent questions, questions in which the answers require inferences based on careful attention to the text.
3. **Building knowledge through content-rich nonfiction**
Building knowledge through content-rich nonfiction plays an essential role in literacy and in the Standards. In K–5, fulfilling the standards requires a 50–50 balance between informational and literary reading. Informational reading primarily includes content-rich non-fiction in history/social studies, science and the arts. The K–5 Standards strongly recommend that students build content general knowledge both within each year and across years. In 6–12, ELA standards place much greater attention to a specific category of informational text—expository nonfiction. It has been traditional. In grades 6–12, the Standards for Literacy in history/social studies, science and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing.

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- Complex Text
- Academic Language
- Evidence from Text
- Building Knowledge
- Content-Rich Nonfiction

Common Core Math Shifts

Common Core State Standards Shifts in Mathematics

1. **Focus strongly where the Standards focus.**
Focus: The Standards call for a greater focus in mathematics. Rather than racing to cover topics in a wide-wide, shallow curriculum, the Standards require us to significantly narrow and deepen the new time and energy is spent in the math classroom. We focus deeply on the major work* of each grade so that students can gain strong foundations, solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom.
2. **Coherence: Think across grades, and link to major topics within grades.**
Thinking across grades: The Standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years. Each standard is not a new event, but an extension of previous learning.
Linking to major topics: Instead of allowing additional or supporting topics to distract from the focus of the grade, these concepts serve the grade-level focus. For example, instead of data displays as an end in themselves, they are an opportunity to do grade-level word problems.
3. **Rigor in major topics* pursue:**
 - **conceptual understanding,**
 - **procedural skill and fluency,**
 - **and**
 - **application with equal intensity.****Conceptual understanding:** The Standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from a number of perspectives so that they are able to see math as more than a set of rote procedures or discrete procedures.
Procedural skill and fluency: The Standards call for speed and accuracy in calculation. Students are given opportunities to practice core functions such as single-digit multiplication so that they have access to more complex concepts and procedures.
Application: The Standards call for students to use math fluently for applications in problem-solving contexts. In content areas outside of math, particularly science, students are given the opportunity to use math to make meaning of and access content.

- Concepts and Skills
- Problem Solving
- Thinking Across Grades
- Conceptual Understanding
- Fluency
- Application

Academic/Growth Mindset

Hierarchy of Learner Needs



... Integrity, responsibility and
Perseverance...

Explorer Elementary Exhibition



Engaging Students in
Work that Matters



Future Ready
Learning Goals



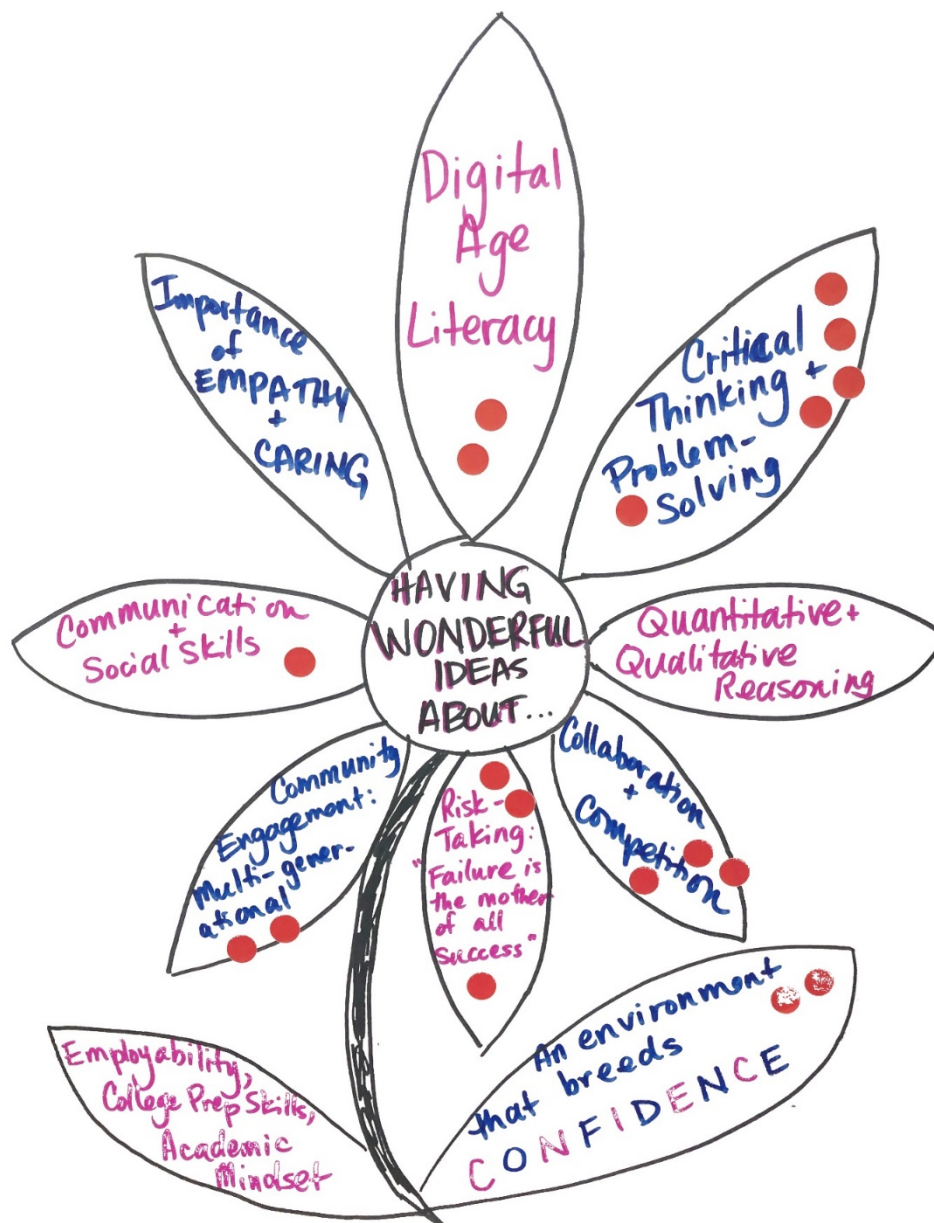
Program Overview Present and Future Priorities

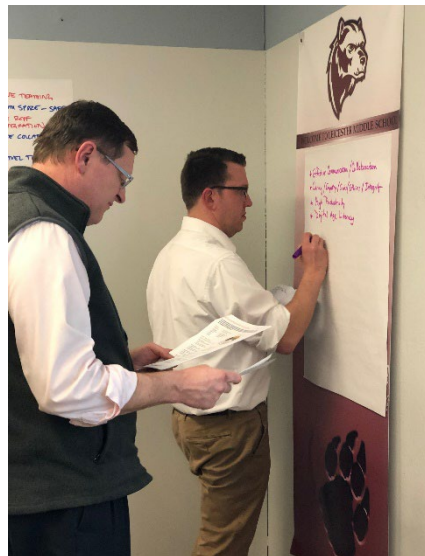


SCOG Analysis Strengths – Challenges Opportunities and Goals



Q & A





- Critical thinking and Problem Solving •••••
- Effective written and oral Communication
- Assessing and analyzing information
- Integrity and ethical Decision making •
- Adaptability, initiative, and risk taking •
- Teaming, collaboration, and interpersonal skills •••

