



# The Future of Artificial Intelligence and It's Impact on Education

Dr. Bill Daggett  
Eastern Suffolk BOCES  
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SPN 

# Preparing for the Future Begins by Caring for the Present

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## Pressing Challenges

- Learning Loss

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## Pressing Challenges

- Learning Loss
- How To Do School

SPN 


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- Learning Loss
- How To Do School
- Mental Health

SPN 

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- Learning Loss
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- Mental Health
- Parent/Community Pressure

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## Pressing Challenges

- Learning Loss
- How To Do School
- Mental Health
- Parent/Community Pressure
- School Safety

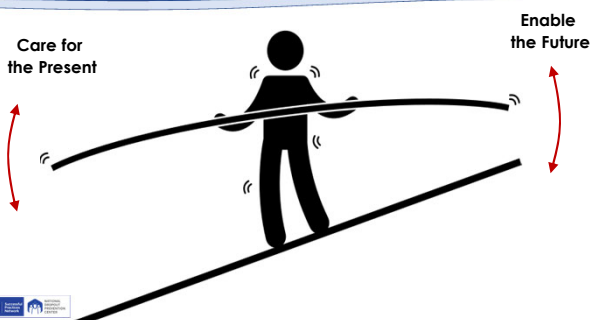


## Pressing Challenges

- Learning Loss
- How To Do School
- Mental Health
- Parent/Community Pressure
- School Safety
- Workforce Pipeline



## From Stabilizing to Transitioning the System

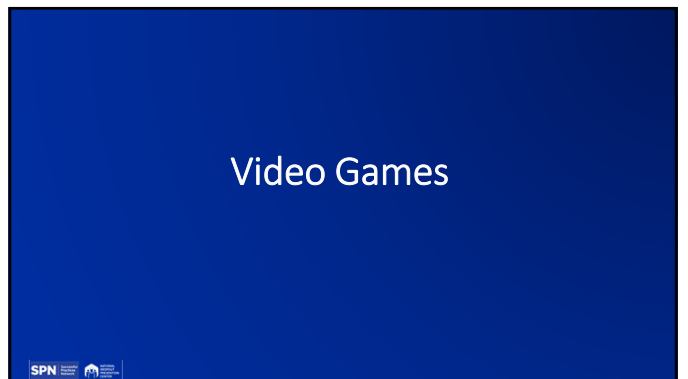
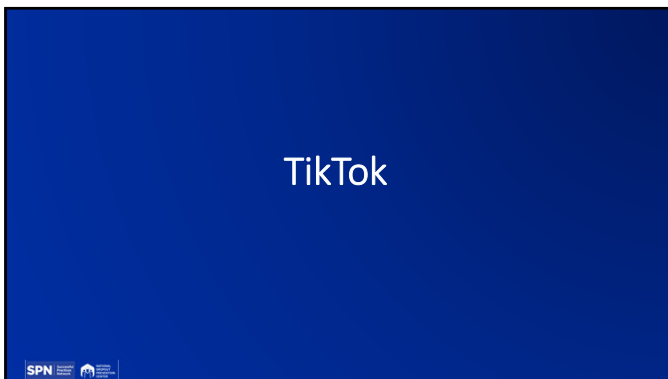
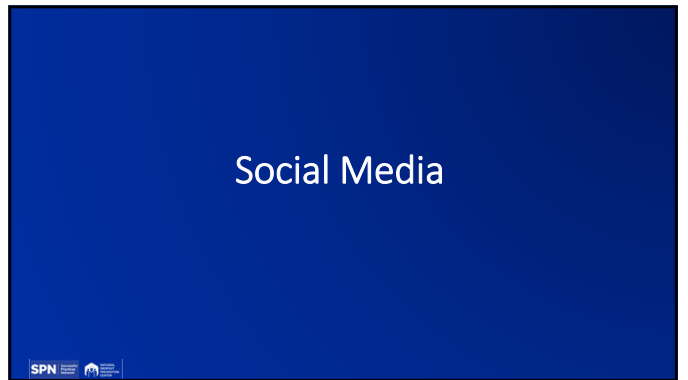
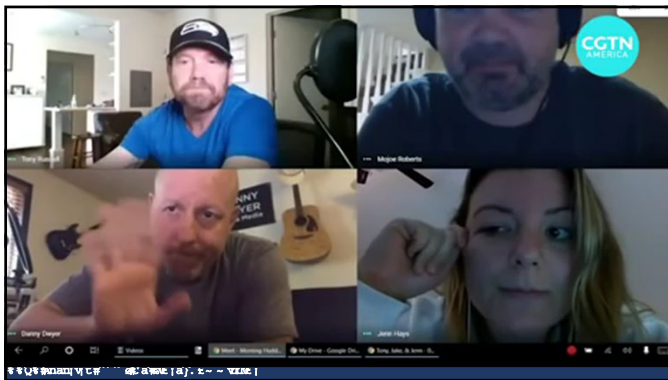


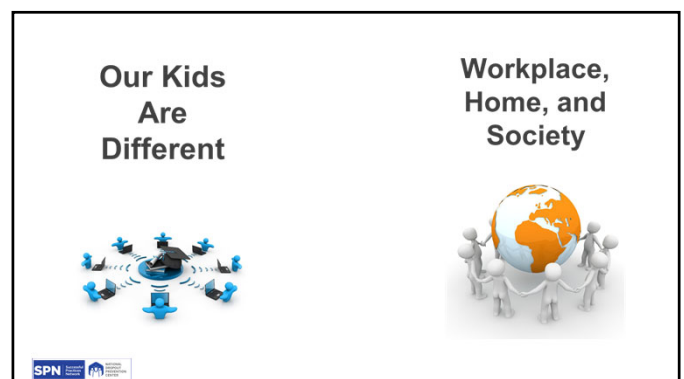
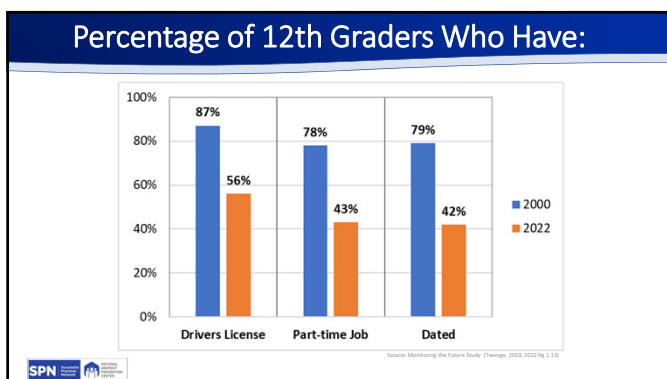
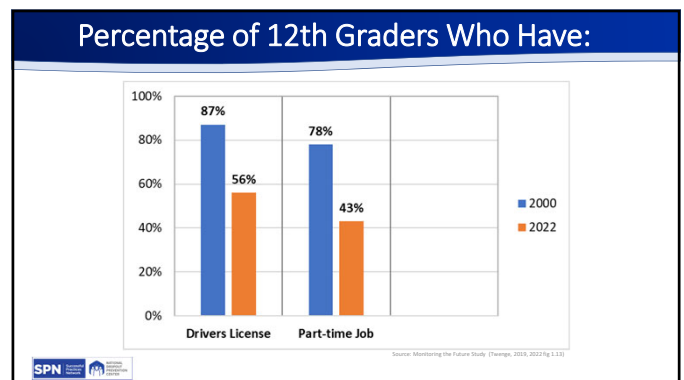
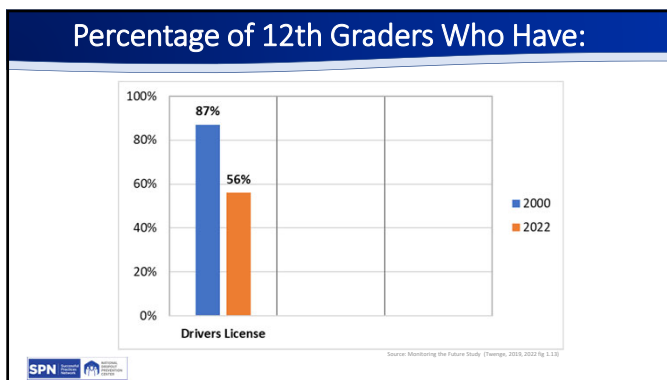
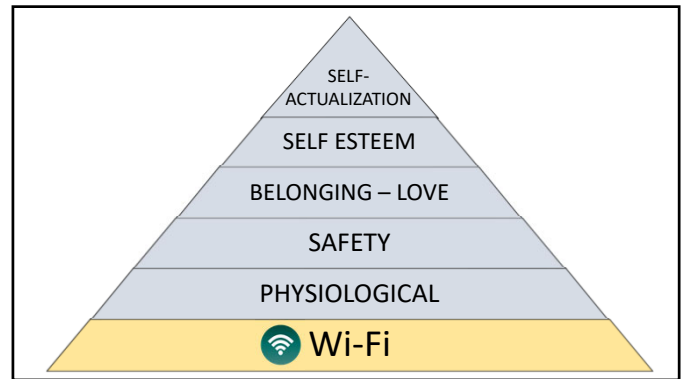
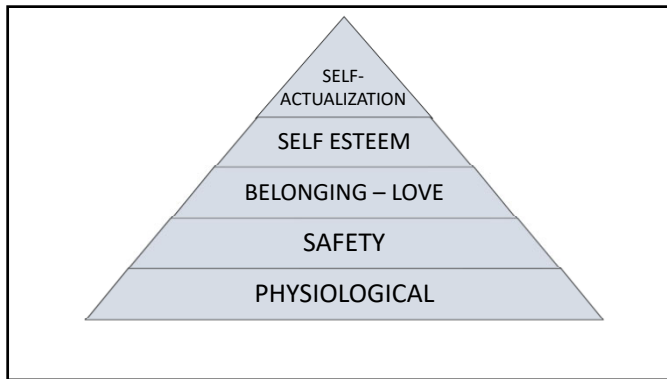
WHY



## Our Kids Are Different







We are moving from the age of IT  
to  
the age of AI

Print changed how people communicated  
and learned, which impacted the  
knowledge and skills they needed.

Print changed how people communicated  
and learned, which impacted the  
knowledge and skills they needed.

AI is having the same impact – just at  
lightning speed.

ChatGPT (OpenAI)

ChatGPT (OpenAI)  
to  
BARD (Google)

ChatGPT (OpenAI)  
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ClaudeAI  
to  
Gamma  
to  
Microsoft Bing

## Opportunities

## Teaching Assistant

### AI can.....

- Lesson plans
- Describe a lesson and ask for way to make it more engaging
- Assessments
- Curriculum
- Communications with parents
- IEPs

Write an email to a parent who wants to assist their child in reading. The child is reading below the grade 4 level and is a reluctant reader. The child is very interested in football.

Dear [Parent's Name],

We hope this email finds you and your family in good spirits. We are writing to you today in response to your query about assisting your child in improving their reading skills. It's wonderful to hear that you are proactive and invested in your child's development.

We understand that your child is currently reading below the grade 4 level and shows some reluctance towards reading. It's not uncommon for children to face challenges in reading or to show reluctance towards it. The key is to find ways to make reading more engaging and enjoyable for them.

Since your child is very interested in football, we can use this passion to fuel their interest in reading. Here are a few suggestions:

**1. Football Books:** Start by providing books that are centered around football. There are many books available that cater to different reading levels and interests - from football storybooks to football player biographies, and books on football facts and trivia.

**2. Interactive Reading:** Make reading a fun and interactive activity. For instance, you could read a football book together, and then watch a football match or play a game of football. This will create a positive association with reading.

**3. Setting Goals:** Just like in football, setting goals can be a motivating factor. Set small, achievable reading goals for your child and celebrate when they achieve them. For example, reading a chapter a day or finishing a book in a week.

**4. Positive Reinforcement:** Provide positive reinforcement when your child makes progress. Praise them for their efforts and provide rewards, such as football stickers or trading cards.

Remember, the goal is to make reading enjoyable and engaging for your child, so they will be motivated to read more.

Additionally, it's important to be patient and supportive during this journey. It may take some time, but with consistent effort and encouragement, your child can improve their reading skills.

Thank you for your commitment to your child's education. If you have any further questions or need more assistance, please do not hesitate to contact us.

Warm regards,

[Your Name] [Your Position] [Your Organization]

## Recommend specific books on football

Certainly! Here are some football books that may engage your child and help improve their reading skills:

- 1. World Soccer Legends series by Illugi Jökulsson:** These are biographies of world-famous football players like Messi, Ronaldo, and Neymar. The language is accessible, and it is filled with fun facts, illustrations, and photographs.
  - 2. The Football Boy Wonder by Martin Smith:** This is a fictional story about a boy who dreams of becoming a footballer. It is an exciting and inspirational read for children.
  - 3. The Unofficial Guide to World Cup by Michael Coleman:** This book is filled with fun facts, statistics, and history about the FIFA World Cup. It is engaging and informative.
  - 4. Football Superstars series by Kirsty Holmes:** This series features the biographies of current football stars. The language is simple and accessible.
  - 5. Frankie's Magic Football series by Frank Lampard:** This is a series of adventure books featuring a boy named Frankie and his football-loving friends. The series combines the excitement of football with magical adventures.
- Remember to encourage your child to read at their own pace and provide positive reinforcement along the way. Happy reading!

## Recommend books about American football

Absolutely, here are some books centered around American football that could be suitable for your child:

- 1. "Family Huddle" by Peyton Manning, Eli Manning, and Archie Manning:** This is a picture book that details the Manning brothers' childhood with fun illustrations. It's a great story about family and football.
  - 2. "The Dog That Stole Football Plays" by Matt Christopher:** This is a fun and lighthearted book about a boy and his dog who can predict football plays. Matt Christopher has written many sports-themed books for children, so you might find other books by him that your child would enjoy.
  - 3. "Touchdown Kid" by Tim Green:** This is a story about a young boy who gets a scholarship to an elite private school and has to prove himself on the football field. Tim Green, a former NFL player, has written many sports-themed books for kids.
  - 4. "Football Double Threat" by Matt Christopher:** This book is about a boy who struggles to choose between playing football or focusing on his grades.
  - 5. "Little Rhino: My New Team" by Ryan Howard and Krystle Howard:** This is the first book in a series about a boy who plays little league football.
- Remember to check the reading level and suitability of each book before giving it to your child. Enjoy reading!

## Write a 4<sup>th</sup> grade math lesson plan on geometry.

Write a 4th grade math lesson plan on geometry.



## Exploring Shapes and Their Attributes

**Objective:** Students will be able to identify and describe the attributes of 2D and 3D shapes.

**Introduction (10 minutes):**

- Begin the lesson by introducing the topic of geometry and explain that it is the study of shapes and their properties.
- Ask the students to brainstorm different shapes they know and write them on the chart paper.
- Review the definitions of "2D" and "3D" and explain that we will be exploring both types of shapes.

**Direct Instruction (20 minutes):**

- Introduce different 2D shapes, such as square, rectangle, triangle, circle, and hexagon.
- Draw each shape on the whiteboard and ask the students to identify the number of sides and corners each shape has.
- Discuss the attributes of each shape, such as the length of sides, angles, and symmetry.
- Introduce 3D shapes, such as cube, sphere, cylinder, and cone, and discuss their attributes, such as faces, edges, and vertices.

**Guided Practice (20 minutes):**

- Divide the class into groups and provide each group with a geoboard and rubber bands.
- Instruct the students to create different 2D shapes on the geoboard using rubber bands.
- Have the students share their shapes with the class and describe the

attributes of their shapes.

- Provide each group with a set of 3D shapes and ask them to identify and describe the attributes of each shape.

**Independent Practice (20 minutes):**

- Provide each student with a worksheet on identifying and describing shapes.
- Instruct the students to complete the worksheet independently.
- Circulate the room to provide assistance to students as needed.

**Closure (10 minutes):**

- Review the different types of shapes and their attributes.
  - Ask the students to identify the most challenging part of the lesson and provide an opportunity for questions or clarification.
  - Assign homework on identifying shapes in the environment and describe their attributes.
- Assessment:** The students' understanding of 2D and 3D shapes and their attributes will be assessed through their participation in group and independent activities, as well as their completion of the worksheet. The teacher will also observe and assess the students' ability to identify and describe the attributes of the different shapes during the guided practice activity.

Write a lesson plan based of a 6th grade class reading |

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## Exploring Society through "Lord of the Flies"

Grade level: 6th Grade

Objective:

- Students will be able to analyze the characters and themes of "Lord of the Flies" in order to understand the complexities of human society.
- Students will be able to make connections between the novel and their own experiences in society.
- Students will be able to express their ideas and opinions about the novel through class discussions, group work, and written assignments.

Materials:

- Copies of "Lord of the Flies" by William Golding
- Writing materials (paper, pens/pencils)
- Whiteboard or blackboard and markers/chalk
- Online resources for research (optional)

1. Introduction (10 minutes)

Introduce the novel and its author to the students, providing any necessary background information.

Explain the objective of the lesson and what the students will be learning.

2. Ask students if they have any prior knowledge about the novel, or if they have read it before. *Character Analysis* (30 minutes)

Divide the students into groups and assign each group a character from the novel (Ralph, Jack, Piggy, Simon, etc.).

Instruct the students to read the chapters that their assigned character appears in and take notes on their behavior, actions, and dialogue.

Have each group present their findings to the class, focusing on the personality and motivations of their character.

3. Theme Analysis (20 minutes)

Write the themes of the novel on the board: Power, Fear, Savagery, Civilization, and Freedom.

Instruct the students to form new groups and assign each group a theme to analyze.

Instruct the students to read the novel with a focus on their assigned theme and take notes on how it is portrayed in the story.

Have each group present their findings to the class, focusing on specific examples from the text.

4. Discussion (20 minutes)

Lead a class discussion about the characters and themes of the novel, encouraging the students to express their opinions and ideas.

Ask open-ended questions that promote critical thinking and discussion, such as: "Why do you think the characters behave the way they do?" or "How do the themes of the novel connect to our own experiences in society?"

5. Writing Assignment (30 minutes)

Instruct the students to write a short essay (1-2 pages) on one of the themes of the novel, explaining how it is portrayed in the story and how it relates to their own experiences in society.

Provide prompts and guidelines for the essay if necessary.

Encourage the students to use evidence from the text to support their arguments.

6. Conclusion (10 minutes)

Summarize the key ideas and concepts that the students learned in the lesson.

Remind the students that they will be able to continue exploring the novel in the upcoming lesson.

Assessment:

The teacher will assess the students based on their participation in group work and class discussion, as well as the quality of their written assignments. The written assignment will be graded based on clarity, organization, and use of evidence from the text.

Regenerate response

Write test questions based off of lord of the flies at a

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## Lord of the Flies discussion questions

1. What do you think the author's message is in "Lord of the Flies"? Why do you think he wrote this book?
2. Why do you think the boys on the island start to act more like animals as time goes on?
3. Do you think Ralph is a good leader? Why or why not?
4. Why do you think Jack becomes obsessed with hunting and killing pigs?
5. How do the characters change throughout the book? Which character changes the most, and why?
6. Why do you think Piggy is often bullied and not taken seriously by the other boys?

write an iep for a sd

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## Write an IEP for a second grader with severe ADHD

An Individualized Education Plan (IEP) for a second grader with severe ADHD would be tailored to meet the specific needs of the student. Here is an example IEP:

Student: [Student's Name] Grade: 2nd Date of IEP: [Date]

Present Level of Performance: [Student's Name] is a second grade student who has been diagnosed with severe ADHD. [He/She] has difficulty sustaining attention in the classroom and during independent work, which often results in incomplete assignments. [He/She] struggles to regulate [his/her] behavior and impulses, which sometimes leads to disruptive behavior in the classroom. [He/She] often interrupts peers during class discussions and has difficulty following directions. [He/She] struggles with organizational skills and often loses materials, such as pencils and homework.

Goals and Objectives:

1. [Student's Name] will improve [his/her] ability to sustain attention during independent work and classroom activities by participating in a 10-minute mindfulness exercise at the start of each class period. [He/She] will remain on task for at least 10 minutes without interruption in at least 3 out of 5 opportunities.

[Student's Name] will improve [his/her] ability to regulate behavior and impulses by practicing self-monitoring strategies. [He/She] will use a behavior chart to track [his/her] behavior throughout the day and earn rewards for demonstrating positive behavior. [He/She] will demonstrate positive behavior for at least 80% of the school day in at least 3 out of 5 opportunities.

3. [Student's Name] will improve [his/her] ability to follow directions by participating in a "following directions" activity during each class period. [He/She] will follow verbal and written directions with 80% accuracy in at least 3 out of 5 opportunities.

4. [Student's Name] will improve [his/her] organizational skills by using a visual schedule to keep track of classroom activities and assignments. [He/She] will use the visual schedule to complete assignments on time and turn them in to the teacher. [He/She] will complete and turn in at least 80% of assignments on time in at least 3 out of 5 opportunities.



Special Education and Related Services: [Student's Name] will receive the following special education and related services to support [his/her] academic and social-emotional development:

1. Small group instruction in reading and math
2. Counseling services to address social-emotional needs
3. Consultation with the school psychologist to develop behavior management strategies
4. Occupational therapy to support fine motor skills and handwriting
5. Speech and language therapy to support communication and social skills

Assessment and Progress Monitoring: [Student's Name] will be assessed and progress monitored in the following ways:

1. Ongoing observation by the teacher and other school staff

2. Review of progress on IEP goals at least every 6 months

3. Administration of formal assessments, such as the Woodcock-Johnson Tests of Achievement and the Behavior Assessment System for Children, as needed to inform instruction and measure progress

Placement: [Student's Name] will be placed in a general education classroom with support from special education and related services.

Parental Involvement: [Student's Name]'s parents will be involved in the development and implementation of the IEP. They will receive progress reports at least every 6 months and will be invited to participate in IEP meetings. The school will provide information and resources to support the parents in understanding and advocating for their child's education.

## Example of AI in education

### NWEA - MAP

SPN

## Example of AI in education

### NWEA - MAP

- Increasingly challenging questions to edge of student knowledge/skill.

SPN

Why does it rain?

SPN

### ChatGPT Prompt



Pretend to be a person with IQ of 50. Why does it rain?



It rain because the sky cry, it get sad and the tear fall down on the ground. That how it make everything all wet.



SPN

### ChatGPT Prompt





Pretend to be a person with IQ of 100. Why does it rain?




Well, when the ground gets too warm, the water in the air turns into tiny droplets. And when these droplets get too heavy, they fall to the ground. That's why it rains! It's also caused by the sun heating up the Earth and water evaporating into the air. And when the air gets too full of water droplets, they fall back down to the Earth as rain.



 Pretend to be a person with IQ of 200. Why does it rain?

 Rain is the result of a complex set of meteorological processes that occur in the Earth's atmosphere. Water vapor, which is the gaseous form of water, is present in the air we breathe. As the sun heats the surface of the earth, some of the water vapor in the air is heated and rises into the atmosphere, where it cools and condenses into tiny droplets of liquid water or ice crystals. These droplets or crystals become heavy enough to fall to the ground as precipitation, which includes rain, sleet, snow, and hail. The specific conditions that lead to rain include the presence of moisture in the atmosphere, rising and cooling air, and the formation of clouds, which are made up of millions of these droplets or crystals. The amount of rain that falls, and where and when it falls, is determined by complex interactions between the temperature, pressure, and wind patterns in the atmosphere, as well as topographical features of the earth's surface.



### explain rain to a student with a Lexile score of 300

Rain is when water comes down from the sky. This happens because of a thing we call the "water cycle". Here's how it works:

- 1. Sun Heats Water:** The sun's warmth makes water in oceans, lakes, and rivers turn into a gas called water vapor. This is called "evaporation".
- 2. Water Vapor Rises:** The water vapor rises into the air.
- 3. Clouds Form:** When the water vapor gets high up where the air is colder, it turns back into tiny water droplets. These droplets gather together and form clouds. This is called "condensation".
- 4. Rain Falls:** When lots of these tiny droplets come together, they become too heavy to stay in the cloud. They then fall down to the ground as rain. This is called "precipitation".

So, when you see rain, it is part of this big water cycle that is always happening around us. Isn't that cool?

### explain it to a student with a Lexile score of 600

Rain is a fascinating part of nature, and it's all due to a process known as the water cycle. The water cycle consists of several key stages:

- 1. Evaporation:** This is the first step. When the sun shines on bodies of water, like lakes, rivers, and oceans, the heat makes the water turn into a gas called water vapor. This vapor rises up into the sky.
- 2. Condensation:** As the water vapor goes higher into the sky where the air is cooler, it changes back into tiny droplets of water. These droplets gather together in the sky and form what we see as clouds.
- 3. Precipitation:** When a lot of these tiny water droplets combine in a cloud, they become larger droplets. Eventually, these droplets become too big and heavy to remain in the cloud. They then fall to the ground as rain.

So, when we see rain, it's actually the end of a process that started with the sun heating up water on the earth's surface. This cycle keeps going, as the rainwater will again be heated by the sun and evaporate, starting the process all over again. This continuous movement of water is a critical part of our planet's climate and helps support all life on earth.

### explain it to a student with a Lexile score of 1200

Rain is an integral part of Earth's hydrologic cycle, also known as the water cycle, a critical driver of our planet's overall climate and ecosystem health. This cycle is characterized by a series of complex processes:

- 1. Evaporation:** Solar radiation warms bodies of water — such as oceans, lakes, and rivers — causing the water molecules to gain energy and transition into a gaseous state known as water vapor. This is the process of evaporation. Water is also added to the air through the process of transpiration, where plants release water from their leaves.
- 2. Condensation:** As the water vapor ascends into the atmosphere, it encounters cooler air temperatures. This causes it to condense, transforming back into a liquid state, albeit in the form of microscopic droplets. These droplets cluster together to form clouds, an occurrence facilitated by particulates present in the atmosphere, known as condensation nuclei.
- 3. Precipitation:** Over time, these minuscule water droplets within the clouds can combine through a process called coalescence, growing larger until they are heavy enough to overcome the buoyant forces within the cloud. They then descend towards Earth's surface as rain.

Rain and other forms of precipitation (like snow or hail) are crucial for replenishing Earth's freshwater supplies. After the water falls, it's returned to bodies of water through various pathways including runoff and groundwater flow, ready to begin a new cycle of evaporation.

This continual circulation of water, from the Earth to the atmosphere and back, not only affects the distribution and availability of freshwater around the world, but also plays a critical role in Earth's overall energy balance and climate regulation. Understanding these intricate processes allows us to better appreciate our dependence on and relationship with the natural world.

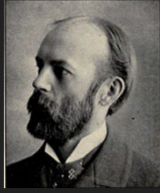
## Example of AI in education

### NWEA - MAP

- Increasingly challenging questions to edge of student knowledge/skill.
- Then personalize to student interest

## ClaudeAI

## Example text set & comparative analysis:



Charles Cooley's "Social Consciousness" (1902)



Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction" (1935)



Elting E. Morison's "A Case Study of Innovation" (1950)

## Prompt (Claude.ai) ...

Cooley identifies the ways in which unchecked capitalism dehumanized Americans during the industrial revolution, and argues for a "social consciousness" to guide America toward a better future. Benjamin begins by making an aesthetic argument around the mechanization of the creation of art using advanced technology, but goes on to extend his argument to write about how mechanical production under capitalism, without changing the "property system" or economic system, naturally becomes fascism and excess productivity and discontent is expressed through warfare. — Now, armed with this information, I would like you to synthesize these ideas, and consider how our modern era and the advent of artificial intelligence may signal another turning point in history. Do you think that the limitless productivity that lies in the promise of artificial intelligence will awaken us to a higher purpose, or send us into the darkest period of mechanized destruction the world has ever seen?

NC

## ... and response (Claude.ai)

That's an excellent synthesis of the key ideas in the Cooley and Benjamin essays. It's thought-provoking to consider how their critiques and concerns might apply to our current technological moment, particularly the rise of AI.

On one hand, the tremendous productivity and efficiency promised by AI could liberate humanity to pursue higher ideals and collective betterment. If more mundane tasks are automated, it could free our energy and attention for creativity, connection, intellectual pursuit, and spiritual growth.

However, there are also risks that without sufficient foresight and changes to our economic models, the fruits of AI could be concentrated in the hands of a few, exacerbating inequality and discontent. And the same technology that promises progress could also enable new forms of mechanized control and destruction.

I don't think the outcome is predetermined. As we've seen throughout history, technology itself is only a tool - neither inherently good nor bad. It all depends on how we choose to develop, govern and utilize these tools. With wisdom, ethics and concerted effort, I am hopeful we can employ the power of AI to create a more just, peaceful and enlightened society. But it will require overcoming tendencies toward greed, exploitation, dehumanization.

The challenges are great, but so is the potential if we have the courage to transform our social consciousness. What gives me hope is seeing people like Cooley and Benjamin shine light on these issues decades ago. It means we can learn from the past to consciously create an ethical, human-centered AI future. But it will require vigilance, collective action, and continually re-examining our values as technology evolves. An encouraging yet humbling task. I don't have definitive answers, but I appreciate you inviting me to consider these profound questions. Please let me know if you would like to discuss any aspect of this further.

AI

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NC

## Pushing further ...

I have not read the Elting E. Morison essay, however a colleague of mine recommended it as I explore this topic of inquiry. How does it relate to the conjectures we have drawn by synthesizing the Cooley and Benjamin essays?

NC

Based on my reading, I see some interesting connections between the Morison essay and the ideas we discussed from the Cooley and Benjamin readings:

- Morison explores resistance to technological and organizational change, even changes that offer clear benefits. This relates to Benjamin's argument that changes in the mode of production/technology transform society, often in ways the existing order resists.
- Morison examines how military hierarchies and bureaucracies ossify and defend the status quo. This resonates with Cooley's critique of how unchecked institutions lose sight of human needs.
- The case study suggests change often requires pressure from outside established power structures. This aligns with Benjamin's claim that ruling classes block transformations that threaten their control.
- Morison advocates enlarging our identifications and loyalty to broader shared goals vs narrow interests. This echoes Cooley's call for more enlightened social consciousness beyond self-interest.
- The essay shows how disruptive new technologies can be initially rejected. This parallels Benjamin's argument that mechanical reproduction revolutionizes art and society.

In summary, Morison provides a detailed case study exploring themes of how societies and institutions adapt (or don't) to changing material and technological realities. This enriches the more theoretical arguments made by Cooley and Benjamin about these dynamics. Let me know if you need me to expand on any connection points that seem relevant.

AI

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NC

## And further ...

In what ways does Morison ground the more theoretical frameworks from Cooley and Benjamin?

NC

You raise an excellent point - Morison's case study provides concrete grounding for some of the more abstract ideas put forth by Cooley and Benjamin. A few key ways Morison's analysis anchors their theoretical frameworks:

- He looks at specific individuals and institutions responding to a technological change, illustrating the human elements involved.
- He examines the tensions and conflicts that arose in granular detail, bringing to life the struggle between forces of change and resistance.
- Morison delves into the interpersonal, psychological, and organizational dynamics, going beyond broad societal analysis.
- The narrative format creates a more tangible and vivid depiction of how these theories operate in practice.
- His conclusions and suggestions have immediate real-world applicability, taking the philosophies of Cooley and Benjamin from lofty ideals into practical guidance.
- He borrows from specific disciplines like psychology and organizational behavior to provide multidisciplinary support.

In essence, Morison puts flesh on the theoretical bones provided by Cooley and Benjamin, bridging the gap between abstraction and lived experience. He grounds their insights in the messiness of real life, yet retains the compelling power of their ideas. Please let me know if you need any clarification or have additional thoughts to discuss on this topic.

AI

Copy

Retry

NC

## Personalized AI Tutor

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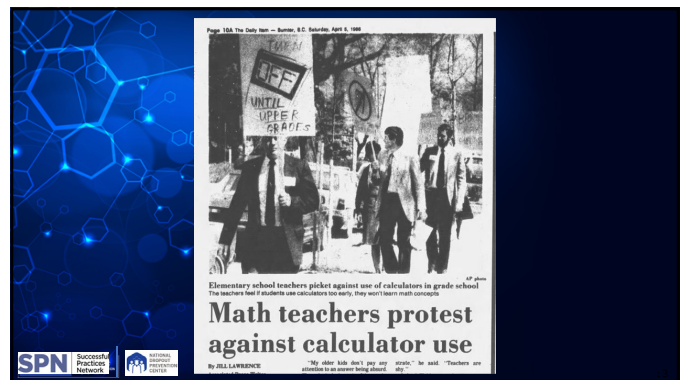
## Shift from a Proficiency to a Growth Model

## Example of AI in education

### NWEA - MAP

- Increasingly challenging questions to edge of student knowledge/skill.
- Then personalize to student interest
- Create suggested curriculum, instructional strategies and assessments

## Challenges



## ChatGPT

ChatGPT can write:

- Poetry
- Essays
- Writing assignments
- Complete math problems

## AI test classifier

GPTZero

Have ChatGPT prepare test questions to evaluate students' knowledge of what they wrote.

Use ChatGPT for a first draft and then direct students to improve upon it.

“Where will I ever use this?”  
“Why do I need to learn this?”

Shift classroom instruction and homework

Cyber Security

Artificial Intelligence  
In the World Beyond School

## ChatGPT

ChatGPT can write:

- Technical reports
- Law briefs
- Code

```

USER
this code is not working like i expect -- how do i fix it?

resultWorkerErr := make(chan error)
defer close(resultWorkerErr)
go func() {
    defer cancel()
    resultWorkerErr <- b.resultWorker(ctx)
}()

err := b.worker(ctx)
cancel()
if err == nil {
    return <-resultWorkerErr
}
return multierror.Append(err, <-resultWorkerErr)
  
```

Shift from **Content**

Shift from Content to **Skills**.

Industrial-age machines enabled workers to accomplish physical task beyond the capabilities of their own bodies.

Industrial-age machines enabled workers to accomplish physical task beyond the capabilities of their own bodies.

**AI is doing the same to knowledge workers.**

## Impact of AI in corporate workplace

- 7% of jobs will be eliminated
- 67% of workers will have half of their workload impacted
- 30% will have minor impact (physical labor and human touch)

## AI will:

- Replace some jobs

## AI will:

- Replace some jobs
- Fundamentally change many jobs

## Jobs at Risk by AI

- Computer programmers
- Coders
- Software developers and engineers
- Content creators
- Technical writers
- Journalist
- Advertisers
- Para legals

## Jobs at Risk by AI

- Court reporters
- Legal secretaries
- Medical secretaries
- Data entry clerks
- Medical assistants
- Medical records personnel
- Market researchers
- Financial analysts

## Jobs at Risk by AI

- Data managers
- Traders
- Insurance agents
- Graphic designers
- Accountants
- Bookkeepers
- Customer service agents
- Web designers

## Co-Counsel

### ChatGPT applications in legal profession

- Conduct legal research

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- Summarize court opinions and filings

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- Summarize court opinions and filings
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- Prepare deposition questions
- All communications



### AI will:

- Replace some jobs
- Fundamentally change many jobs
- Create new jobs



In 1970's the prediction was ATMs would dramatically reduce the need for bank tellers.



There are more bank tellers today than there were in the 1970's.

But they perform different tasks and need a different set of skills.



Most workers will not be replaced by AI.



Most workers will not be replaced by AI.

They will be replaced by a person with skills that AI does not possess.



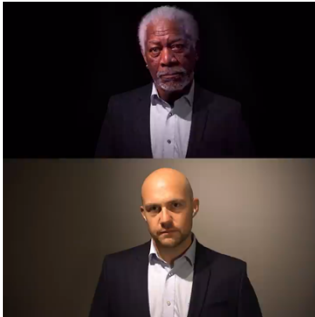
## Technology applications embedding AI

- Deep Fake
- Blockchain
- Bioscience
- Nanotechnology
- Virtual and Augmented Reality
- Machine Learning
- 3D Printing



## Technology applications embedding AI

- Deep Fake



Successful  
Practices  
Network

You can not change faster than  
the rate of readiness and trust.



Successful  
Practices  
Network

Our Kids  
Are  
Different



Workplace,  
Home, and  
Society



How do  
**SCHOOLS**  
Bridge the Gap?



## What should we be focused on?

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- The challenges to and opportunities for our existing instructional practices?

## What should we be focused on?

- The challenges to and opportunities for our existing instructional practices?
- The skills, knowledge and attributes our students will need to be independent in the AI age?

## Needed

- Knowledge
- Skills

A critical skill in the age of artificial intelligence is the ability to do sophisticated **editing**.

A critical skill in the age of artificial intelligence is the ability to write sophisticated **prompts**

A critical skill in the age of artificial intelligence is **digital ethics**.

## Needed

- Knowledge
- Skills
- Attributes
- Dispositions

## Worker will need to:

- Develop skills not easily replicated by AI
- Be able to work in an AI environment
- Be resilient and adaptable

**56 foundational skills that will help citizens thrive in the future of work.**

*56 DELTAS across 13 skill groups and four categories*

SOURCE: Marco Dondi, Julia Klier, Frederic Panier, and Jörg Schubert, *Defining the skills citizens will need in the future world of work*, McKinsey & Company, June 2021

Cognitive		Interpersonal	
<b>Critical thinking</b> <ul style="list-style-type: none"> <li>Structured problem solving</li> <li>Logical reasoning</li> <li>Understanding biases</li> <li>Gathering relevant information</li> </ul>	<b>Planning and ways of working</b> <ul style="list-style-type: none"> <li>Task plan development</li> <li>Time management and prioritization</li> <li>Agile thinking</li> </ul>	<b>Building systems</b> <ul style="list-style-type: none"> <li>Task modeling</li> <li>Inter- and intra-team cooperation</li> <li>Drafting an inspiring vision</li> <li>Organizational awareness</li> </ul>	<b>Developing relationships</b> <ul style="list-style-type: none"> <li>Empathy</li> <li>Building trust</li> <li>Flexibility</li> <li>Resilience</li> </ul>
<b>Communication</b> <ul style="list-style-type: none"> <li>Storytelling and public speaking</li> <li>Asking the right questions</li> <li>Synthesizing messages</li> <li>Active listening</li> </ul>	<b>Mental flexibility</b> <ul style="list-style-type: none"> <li>Creativity and imagination</li> <li>Translating knowledge to different contexts</li> <li>Adopting a different perspective</li> <li>Adaptability</li> <li>Ability to learn</li> </ul>	<b>Teamwork effectiveness</b> <ul style="list-style-type: none"> <li>Facilitating individuals</li> <li>Managing different personalities</li> <li>Resolving conflicts</li> </ul>	<b>Collaboration</b> <ul style="list-style-type: none"> <li>Coaching</li> <li>Empowering</li> </ul>
Self-leadership		Digital	
<b>Self-awareness and self-management</b> <ul style="list-style-type: none"> <li>Understanding own emotions and triggers</li> <li>Self-control and regulation</li> <li>Understanding own strengths</li> </ul>	<b>Integrity</b> <ul style="list-style-type: none"> <li>Self-reflection and self-critique</li> <li>Self-confidence</li> </ul>	<b>Digital fluency and citizenship</b> <ul style="list-style-type: none"> <li>Digital literacy</li> <li>Digital learning</li> <li>Digital collaboration</li> <li>Digital ethics</li> </ul>	
<b>Entrepreneurship</b> <ul style="list-style-type: none"> <li>Courage and risk-taking</li> <li>Driving change and innovation</li> </ul>	<b>Energy, passion, and optimism</b> <ul style="list-style-type: none"> <li>Breaking into new markets</li> </ul>	<b>Software use and development</b> <ul style="list-style-type: none"> <li>Programming literacy</li> <li>Data analysis and statistics</li> <li>Computational and algorithmic thinking</li> </ul>	
<b>Goal achievement</b> <ul style="list-style-type: none"> <li>Determination and discipline</li> <li>Achievement orientation</li> </ul>	<b>Gift and persistence</b> <ul style="list-style-type: none"> <li>Working with uncertainty</li> <li>Self-development</li> </ul>	<b>Understanding digital systems</b> <ul style="list-style-type: none"> <li>Data literacy</li> <li>Smart systems</li> <li>Cybersecurity literacy</li> <li>Tech translation and procurement</li> </ul>	

## PORTRAIT OF A GRADUATE



Do not abandon content but....

## Needed

- Knowledge
- Skills



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A critical skill in the age of artificial intelligence is the ability to write sophisticated **prompts**



A critical skill in the age of artificial intelligence is **digital ethics**.



56 foundational skills that will help citizens thrive in the future of work.

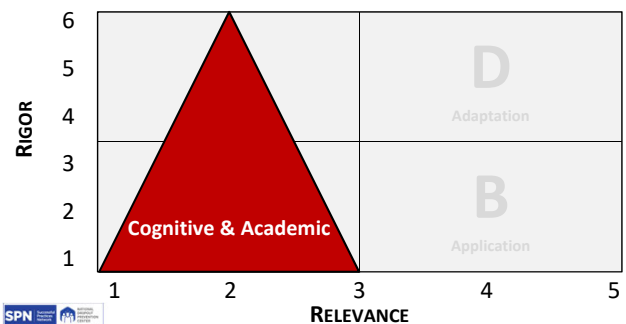
56 DELTAS across 13 skill groups and four categories

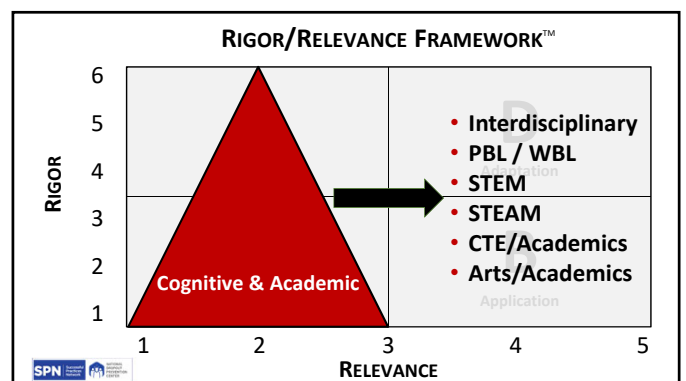
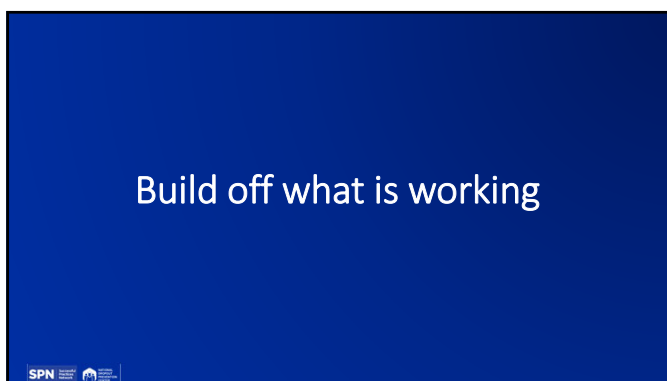
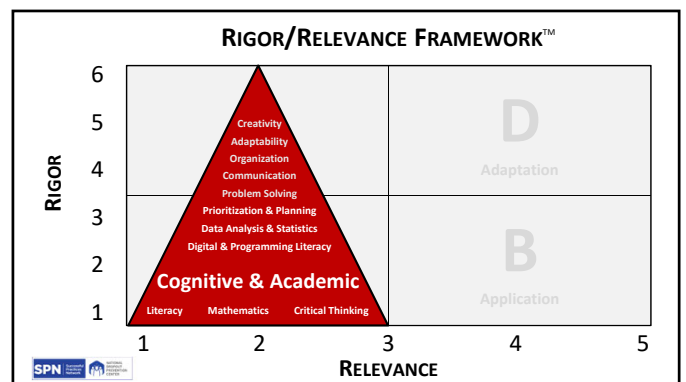
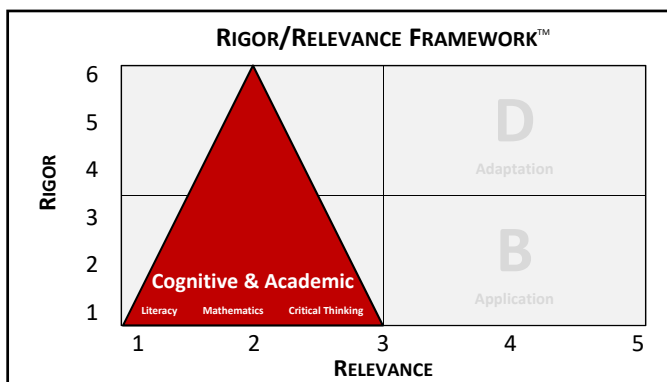
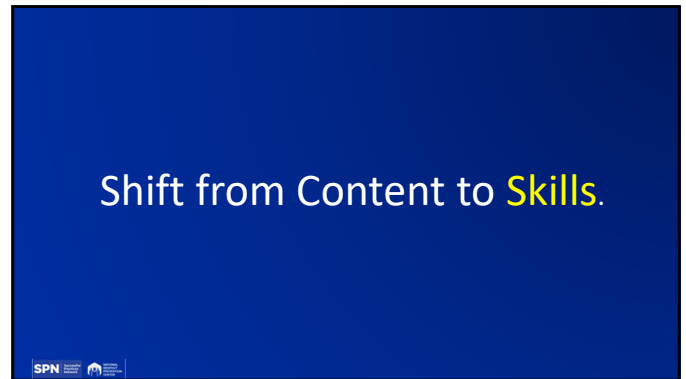
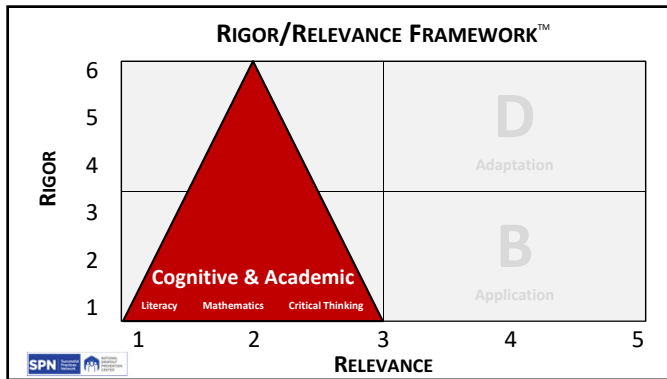


SOURCE: Marco Dondi, Julia Klier, Frederic Panier, and Jorg Schubert, *Defining the skills citizens will need in the future world of work*, McKinsey & Company, June 2021



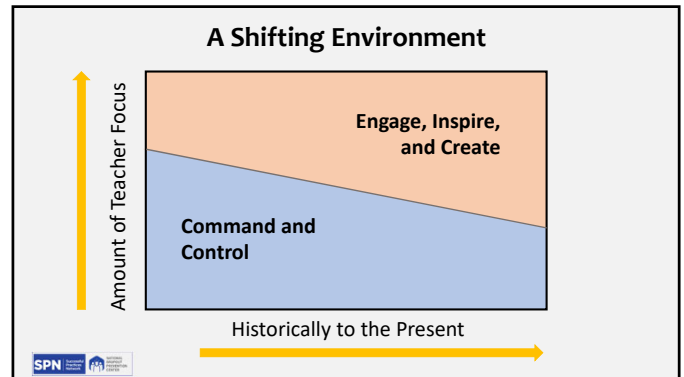
## RIGOR/RELEVANCE FRAMEWORK™





We saw a shift in instructional practices from command and control to engage, inspire, and create.

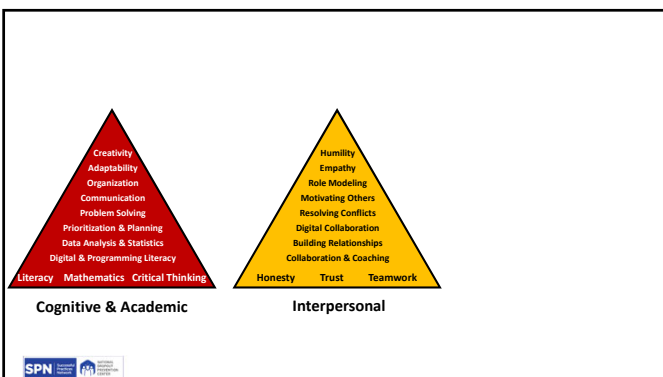
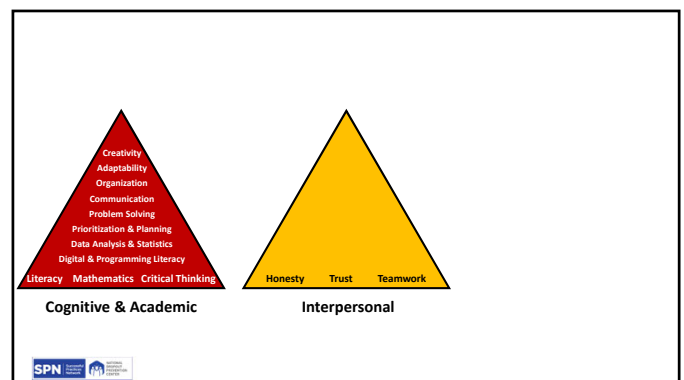
SPN



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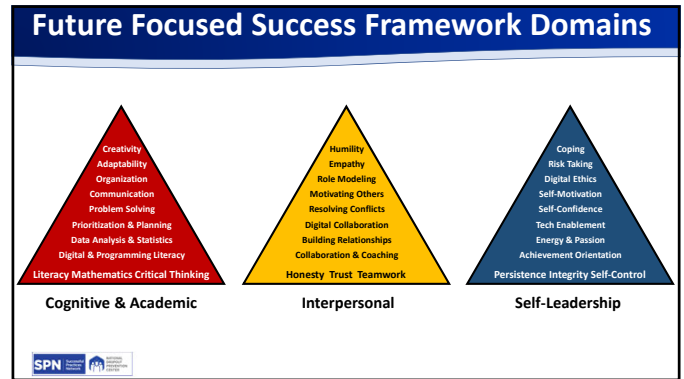
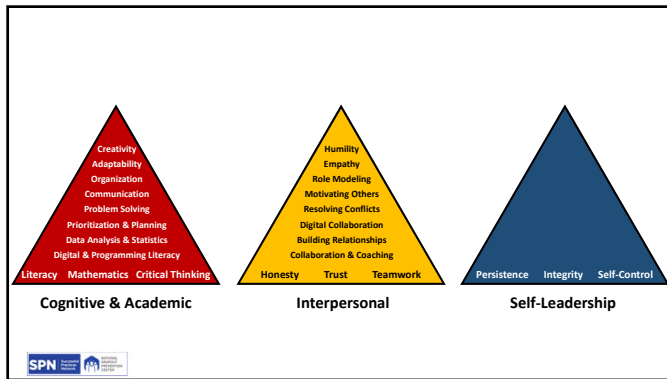


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How well does your curriculum, instructional practices and assessments align to needed skills, knowledge and attributes?

The Rubrics for Future Focused Success classify the degree to which the **Curriculum, Instruction, and Assessment** exhibit future focused characteristics in the classroom. Additionally, a fourth category allows the teacher to rate the level at which **Students** are modeling future focused skills, knowledge, and dispositions.

The Rubrics for Future Focused Success have three domain categories: **Cognitive & Academic, Interpersonal, and Self-Leadership.**

We have ...

- an **Instructional Design** Issue

We have ...

- an Instructional Design Issue
- a **Workforce Design** Issue



## We have ...

- an Instructional Design Issue
- a Workforce Design Issue
- a **Learning Space** Issue

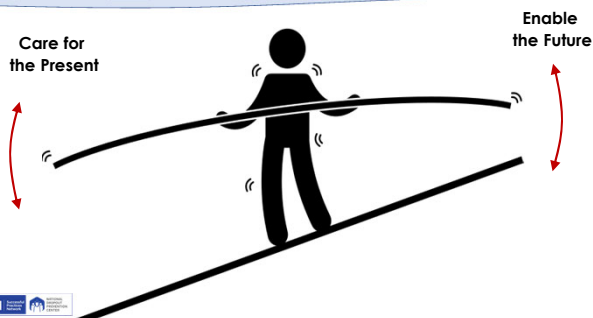


## We have ...

- an Instructional Design Issue
- a Workforce Design Issue
- a **Learning Space** Issue
- an Assessment Issue



## From Stabilizing to Transitioning the System



bill@bdaggett.com

