Students as Agents in Their Learning

Cheryl Lemke
Metiri Group
clemke@metiri.com

Slides: https://bit.ly/3VNesfW

What is Student Agency?
Why is it so important now?
How do teachers empower student to be agents?

How do you measure it?

What is Student Agency?
Why is it so important now?
How do teachers empower student to be agents?

How do you measure it?

Definition

- *Think: agents in their own learning.*

- *Students have agency whenever they self-reflect and then act or interact intentionally to influence their learning experiences.*

Students have agency when they are:
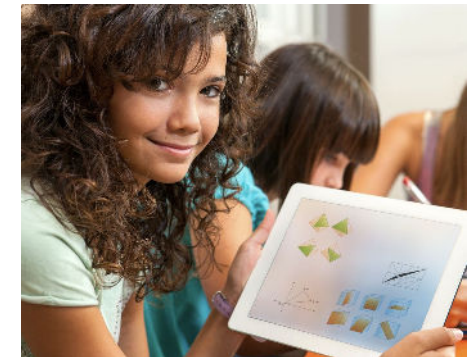
- *Taking intellectual risks*

- *Collaborating*

- *Managing time*

- *Selecting mode of digital resources*

Students have agency when they are:

- *Practicing with intention*

- *Tracking progress to ensure College and Career Readiness*

- *Getting creative*

- *Taking Positions on self-selected Issues - Based on Evidence*

Go to www.menti.com-use code 1991 2968

https://www.menti.com/alyvgrx8xub9
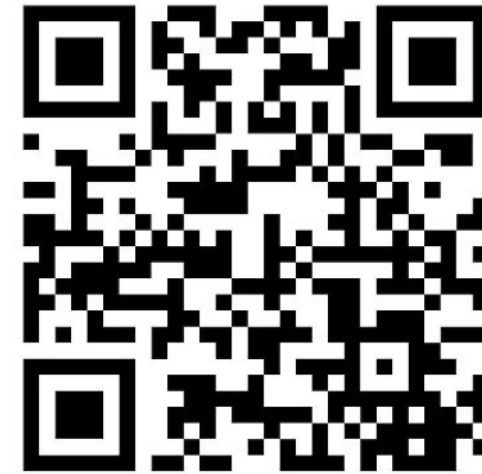
Agency and Self-Direction

A Student with Agency

... self-reflects, acts, and interacts intentionally to influence her learning.

HAS INTENTIONALLY ACTED to INFLUENCE HER LEARNING PROCESSES

A Self-Directed Student

...has the knowledge, attitude and dispositions that empower them to be a positive agent in their own learning.

HAS **THE CAPACITY** AND **IS PREPARED** TO INTENTIONALLY ACT IN WAYS THAT **POSITIVELY** INFLUENCE HER LEARNING PROCESSES

The Self-Directed Student

Before the learning begins, the student:

- Believes she can succeed through hard work and perseverance
- Has a clear understanding of what she needs to accomplish
- Develops a plan and maps out activities
- Finds a way (a hook) that piques her interest in the topic

The Self-Directed Student

During the learning, the student:

- Establishes a place where she can successfully learn
- Stays focused and avoids or ignores distractions
- Monitors her own progress by reflecting on her performance and adjusting
- Talks herself through the challenging parts of learning—self-instructs
- Seeks help when she needs it

The Self-Directed Student

After the learning, the student:

- Accurately compares her progress and performance to standards of excellence
- Takes ownership for this performances and reflects on how to do better
- Takes pride in his accomplishments, knowing they are the result of effort
- After accurately evaluating her own performance, has the capacity to adjust

The Self-Directed Student

Before the learning begins, the student:
- Believes he can succeed through hard work and perseverance
- Has a clear understanding of what he needs to accomplish
- Develops a plan and maps out activities
- Finds a way (a hook) that piques his interest in the topic

During the learning, the student:
- Establishes a place where he can successfully learn
- Stays focused and avoids or ignores distractions
- Monitors his own progress by reflecting on his performance and adjusting
- Talks himself through the challenging parts of learning—self-instructs
- Seeks help when he needs it

After the learning, the student:
- Accurately compares his progress and performance to standards of excellence
- Takes ownership for this performances and reflects on how to do better
- Takes pride in his accomplishments, knowing they are the result of effort
- After accurately evaluating his own performance, has the capacity to adjust

Agency and Self-Direction

A Student with Agency

> **HAS INTENTIONALLY ACTED** to INFLUENCE HER LEARNING PROCESSES

A Student who is Self-Directed

> HAS **THE CAPACITY** AND **IS PREPARED** TO INTENTIONALLY ACT IN WAYS THAT **POSITIVELY** INFLUENCE HER LEARNING PROCESSES

What is Student Agency?
Why is it so important?
How do teachers empower student to be agents?
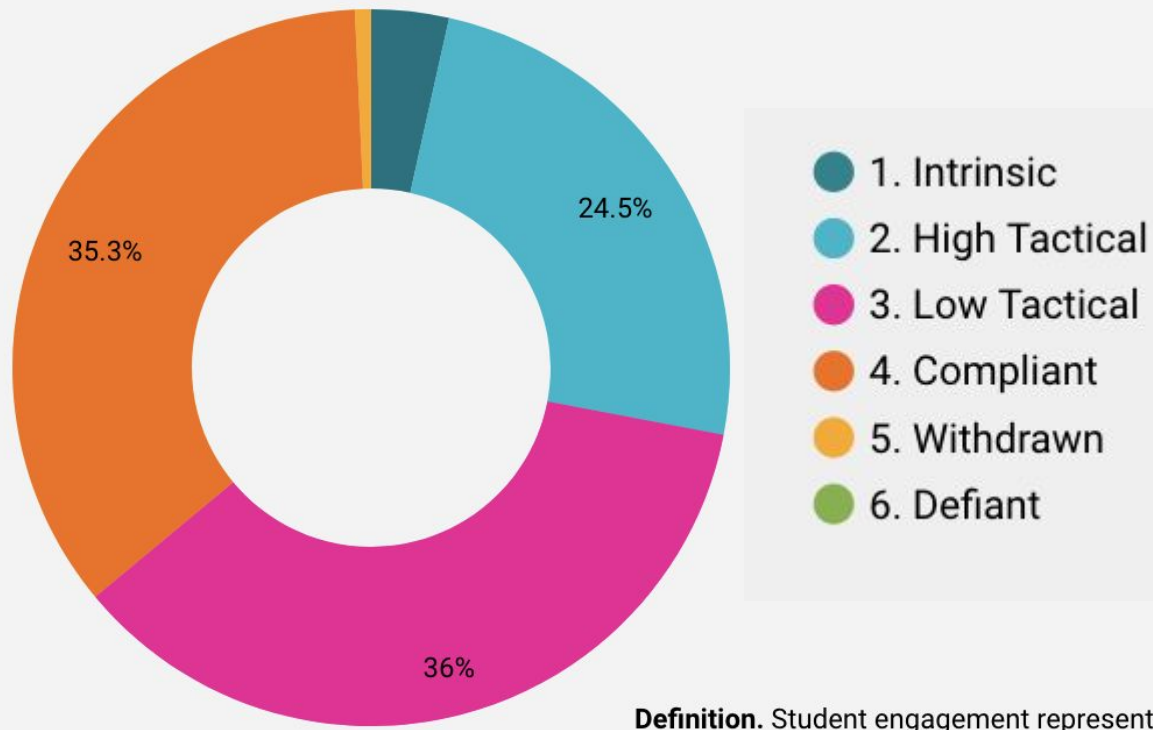
How do you measure it?

Intrinsic motivation to learn

It shifts the motivation to learn from extrinsic rewards and punishments to intrinsic drivers (student's need to know, learn, and be competent).

More on Intrinsic Motivation and Engagement

Levels of Overall Engagement
(for the selected time frame)

24.5%

35.3%

36%

- ● 1. Intrinsic
- ● 2. High Tactical
- ● 3. Low Tactical
- ● 4. Compliant
- ● 5. Withdrawn
- ● 6. Defiant

Definition. Student engagement represents the degree to which students' cognitions, behaviors, and affects are energized, directed, and sustained during academic activities.

1,232

Intrinsic:

- Student sees the activity as personally meaningful.
- The student's level of interest is sufficiently high that he persists in the face of difficulty.
- The student finds the task sufficiently challenging that he believes he will accomplish something of worth by doing it.
- The student's emphasis is on optimum performance and on "getting it right."

Research says...

4 Basic Psychological Needs:

- Belonging or connecting
- Power or competence
- Freedom and choice
- Fun

Sources: Sullo, B. (2007). Activating the Desire to Learn. ASCD Member Book.

Go to www.menti.com-use code 4478 575

METIRI
Group

Why are you interested in student agency?

Short answers are recommended. You have 250 characters left.

250

You can submit multiple answers

Submit

https://www.menti.com/ali6eupv327q

What is Student Agency?
Why is it so important?
How do teachers empower student to be agents?
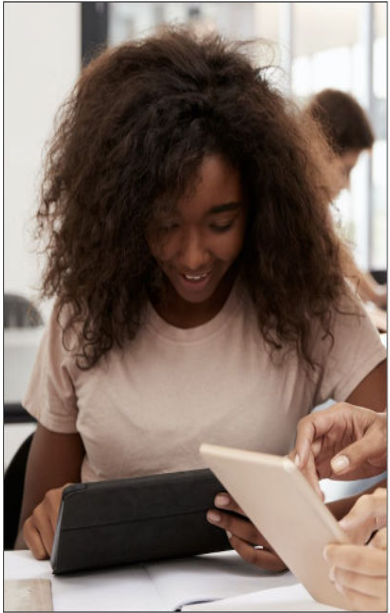
How do you measure it?

1 Promote intellectual risk-taking

- Create a culture of learning that is intellectually safe
- Ground Rules - Respectful
- Wall of Words - Qualifiers
- Grades based on progress and effort
- Feedback - relevant
- Hints and questioning
- Mistakes as learning opportunities

The Self-Directed Student

Before the learning begins, the student:
- Believes he can succeed through hard work and perseverance
- Has a clear understanding of what he needs to accomplish
- Develops a plan and maps out activities
- Finds a way (a hook) that piques his interest in the topic

During the learning, the student:
- Establishes a place where he can successfully learn
- Stays focused and avoids or ignores distractions
- Monitors his own progress by reflecting on his performance and adjusting
- Talks himself through the challenging parts of learning—self-instructs
- Seeks help when he needs it

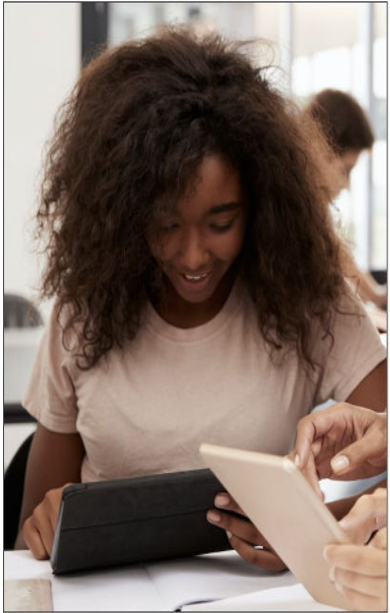**After** the learning, the student:
- Accurately compares his progress and performance to standards of excellence
- Takes ownership for this performances and reflects on how to do better
- Takes pride in his accomplishments, knowing they are the result of effort
- After accurately evaluating his own performance, has the capacity to adjust

2 Explicitly teach students to be self-directed

- What is self-direction?
- Why is it important?
- What is the profile of a self-directed learning?
- What is the students' profile of self-direction?
- What new attitudes, behaviors, and learning strategies do they need to master?

The Self-Directed Student

Before the learning begins, the student:
- Believes he can succeed through hard work and perseverance
- Has a clear understanding of what he needs to accomplish
- Develops a plan and maps out activities
- Finds a way (a hook) that piques his interest in the topic

During the learning, the student:
- Establishes a place where he can successfully learn
- Stays focused and avoids or ignores distractions
- Monitors his own progress by reflecting on his performance and adjusting
- Talks himself through the challenging parts of learning—self-instructs
- Seeks help when he needs it

After the learning, the student:
- Accurately compares his progress and performance to standards of excellence
- Takes ownership for this performances and reflects on how to do better
- Takes pride in his accomplishments, knowing they are the result of effort
- After accurately evaluating his own performance, has the capacity to adjust

3 Redesign learning to enable self-direction

How do teachers build self-direction in their students?

- *Before the learning-- develop a growth mindset in students:*
  - ▷ *Praise effort not intelligence*
  - ▷ *Stories of effort*
  - ▷ *Engagement*
  - ▷ *Grade based on progress and effort*

C How do teachers build self-direction in their students?

- **▰** *Before the learning -- Help students learn to pre-plan and prepare to succeed:*
    - ▷ *Help students to make personal connections and develop an interest in the subject*
    - ▷ *Show them the the big picture re: sets of standards*
    - ▷ *Help them develop schemas that show inter-relationships*
    - ▷ *Facilitate student goal setting and tracking of progress*

- Student finds a way to pique her interest in the topic.

Prior to start of unit, challenge students in ways that reveal misconceptions and preconceptions.

Example: Prior to a unit on heat and temperature a teacher ask students whether a sweater or tinfoil would keep a can of Coke cold longer, asking that they cite evidence for their answer.

Student finds a hook…

Common injuries for boys among popular high school sports
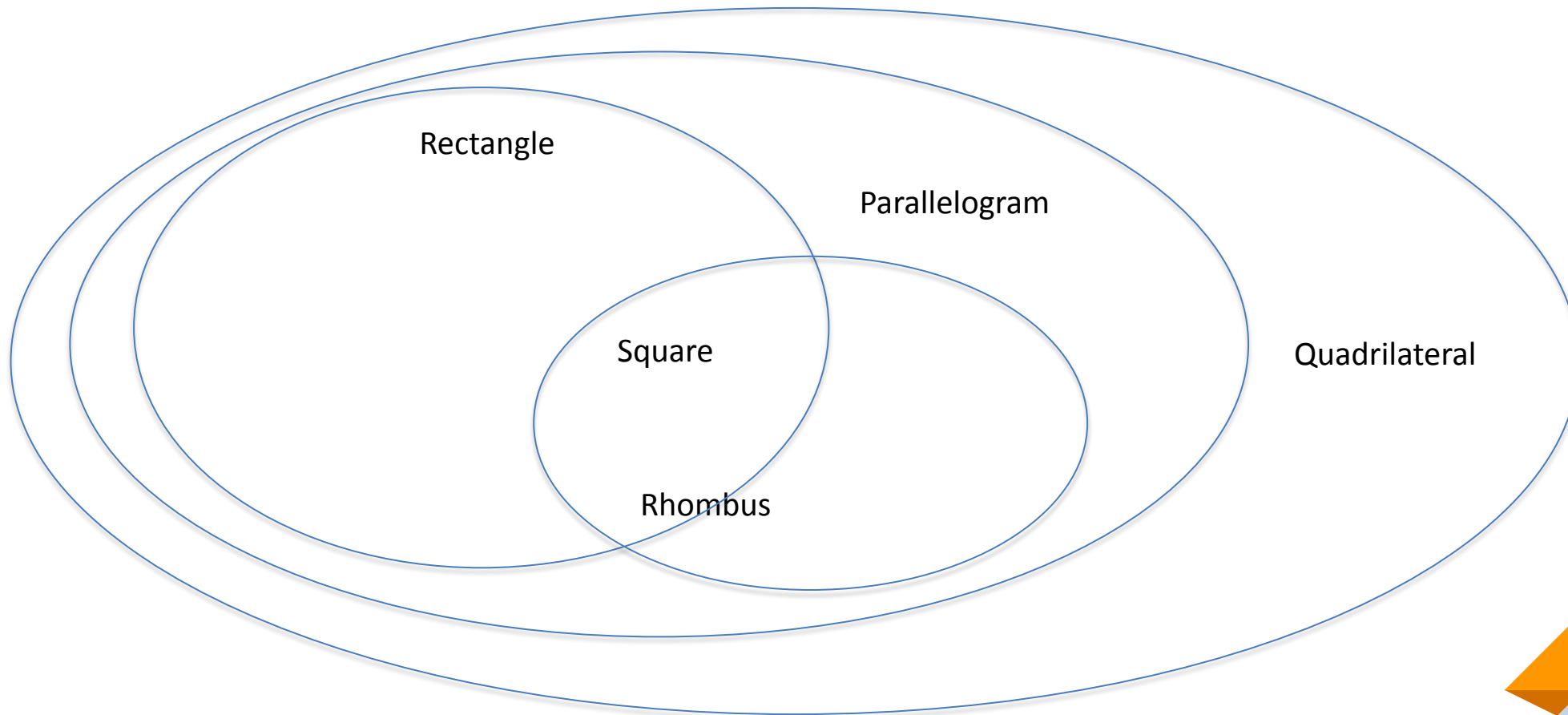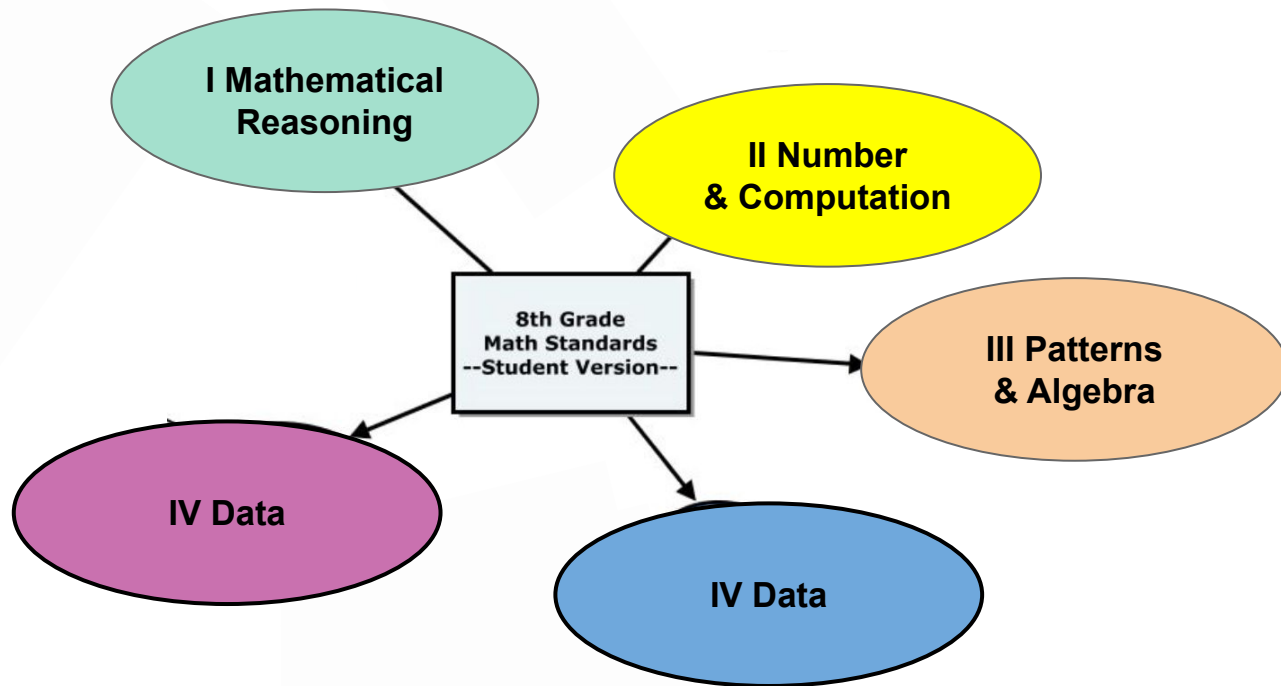Injuries per 10,000 competition plays

New York Times Interactive

https://www.nytimes.com/slideshow/2020/06/10/learning/graphs-charts-and-maps-from-three-years-of-whats-going-on-in-this-graph.html
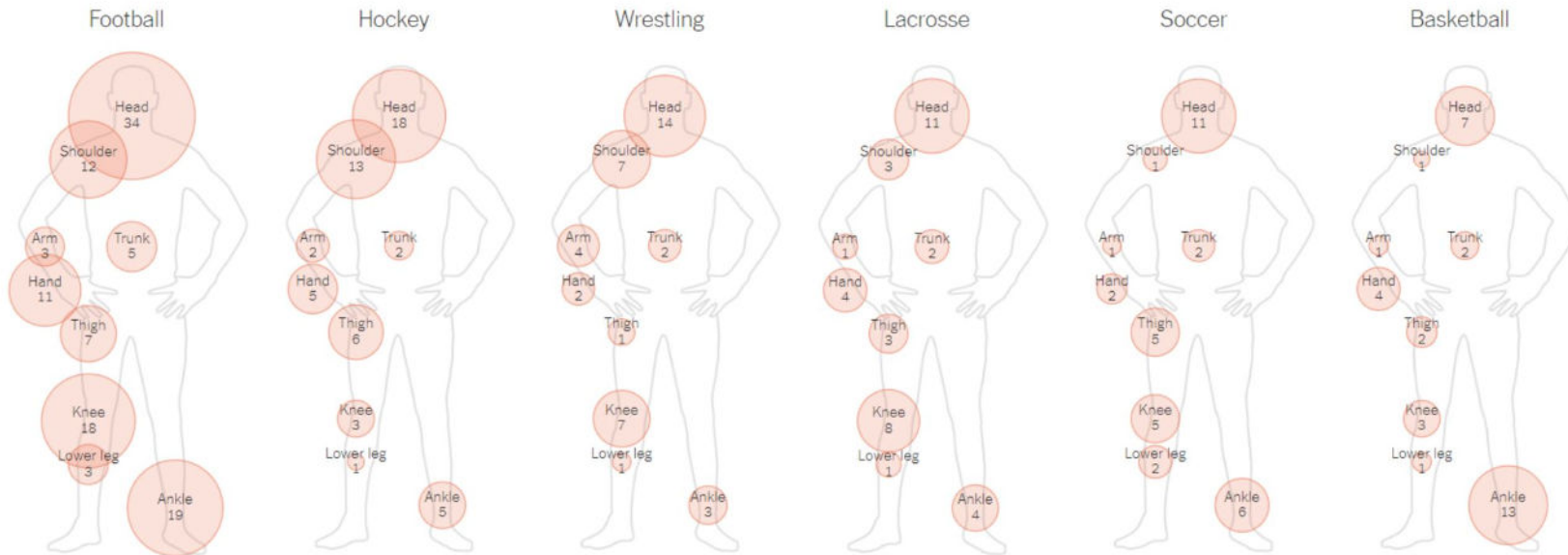
- Has a clear understanding of what she needs to accomplish
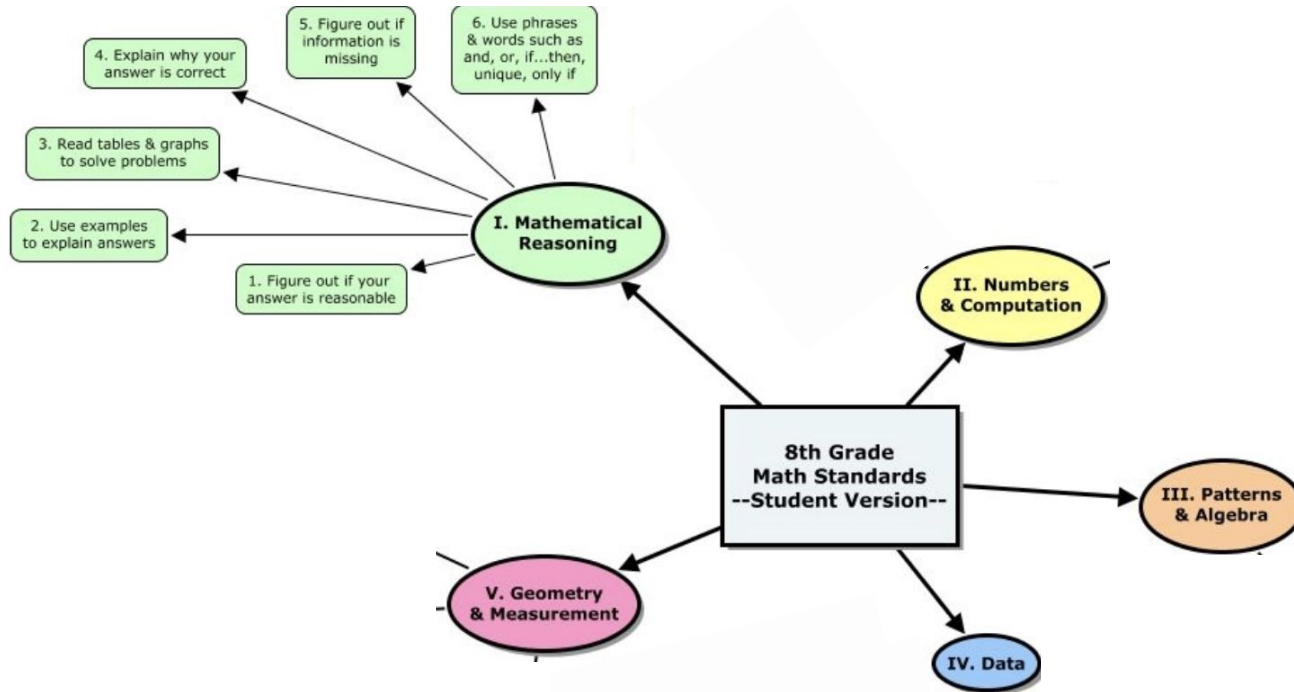
Schema for Clarity

Rectangle

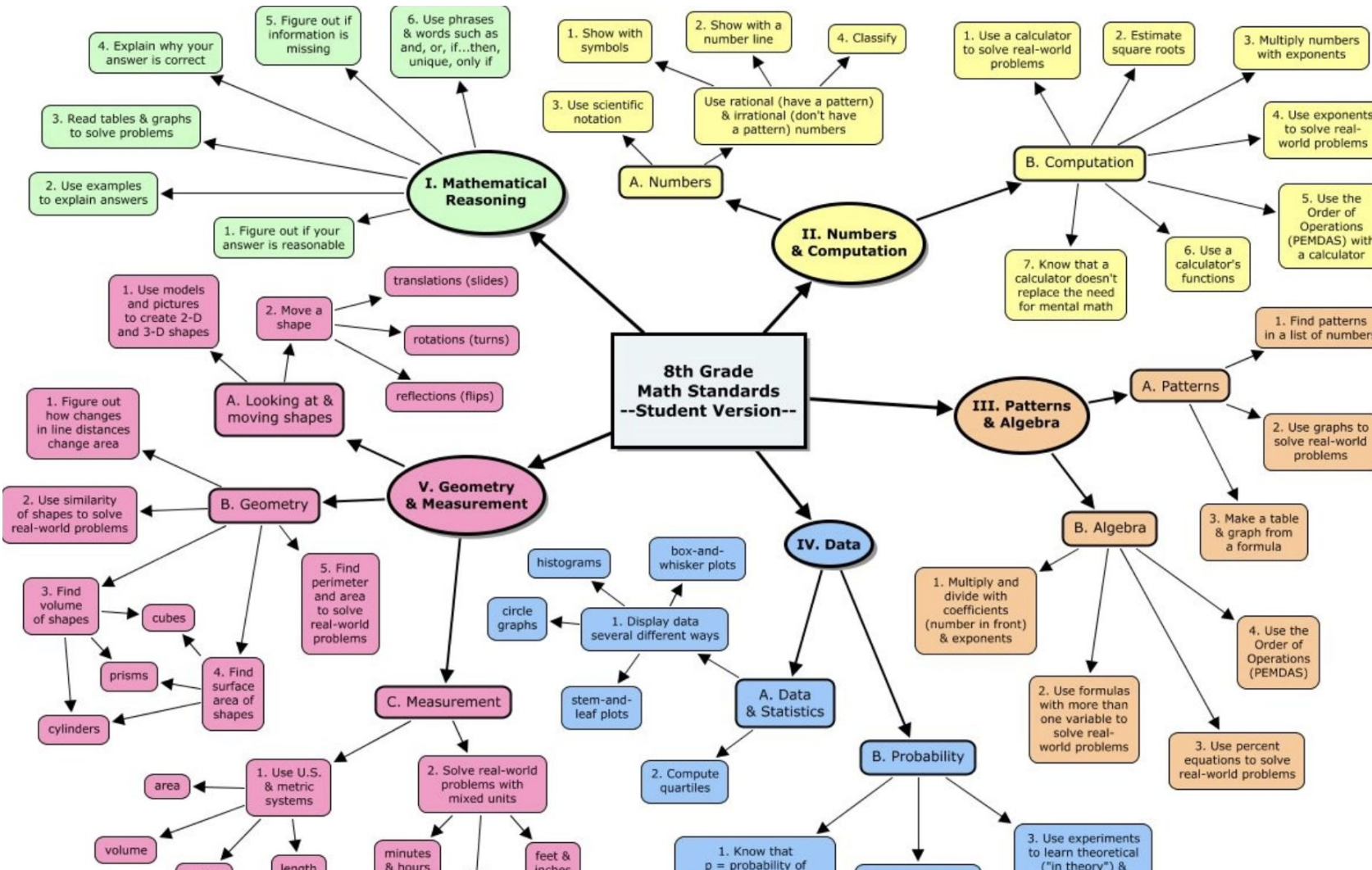Parallelogram

Square

Quadrilateral

Rhombus

Clarity & Connections

Link to student goal-setting & Progress monitoring

Clarity & Connections

Link to student goal-setting & Progress monitoring

Clarity & Connections

- Skill building
- Concept development
- Application
- Culminating project

The Self-Directed Student

During the learning, the student:

- Establishes a place where she can successfully learn
- Stays focused and avoids or ignores distractions
- Monitors her own progress by reflecting on her performance and adjusting
- Talks herself through the challenging parts of learning—self-instructs
- Seeks help when she needs it

Sample Approaches:

- Explicitly discuss how to establish a place of study in the home
- Strategies for avoiding distraction
- Worked Examples
- Time dedicated to reflection on graded assignments with revised strategies
- Modeling self-instruction
- Discuss help-seeking strategies

The Self-Directed Student

After the learning, the student:

- Accurately compares her progress and performance to standards of excellence
- Takes ownership for this performances and reflects on how to do better
- Takes pride in his accomplishments, knowing they are the result of effort
- After accurately evaluating her own performance, has the capacity to adjust

Sample Approaches:

- Modeling
- Rubrics
- Time dedicated to self-evaluation
- No letter grades - only comments
- Exhibitions to celebrate accomplishments and receive feedback

- *After the Learning -- Teach students to self-evaluate based on high standards*
  - ▷ *Track own progress*
  - ▷ *Provide opportunities for consulting*
  - ▷ *Teach students to do a self-check for understanding*
  - ▷ *Provide students with rubrics (what is excellence)*
  - ▷ *Student-led conferencing*

How do teachers inhibit self-direction in their students?

- *Too much direction and review (allow for productive struggle)*
- *Focus on procedures only, without conceptual understanding*
- *No collaboration*
- *Focus on test scores and grades*
- *Praise intelligence*
- *Students not setting own learning goals*

Surface Learning

1. A quantitative increase in knowledge

2. Memorizing

3. Acquiring facts, skills and methods

Deep Learning

4. **Making sense** or abstracting meaning (part to whole, real-world)

5. **Interpreting and understanding reality in a different way**/Reinterpreting knowledge

4 Teach both surface and deep learning

Student interest is piqued when they can apply their skills to the world around them. Find a balance between surface and deep learning. The deep learning is a payoff for the skill building of surface learning.

Frustration

creativity

FLOW

Skill Building

Task

BOREDOM
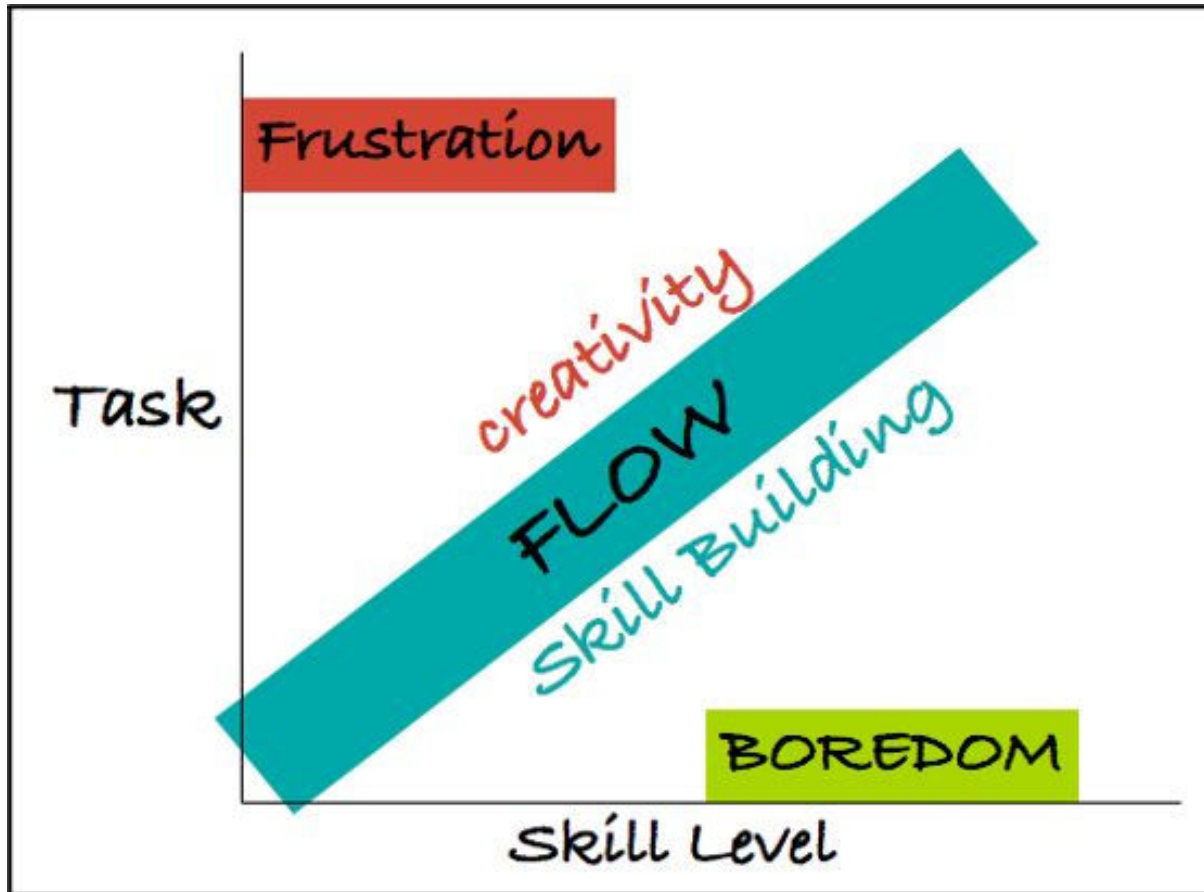
Skill Level

5 Align task complexity with skill level

Find a balance between task complexity and skill level for each student. This will avoid student frustration and boredom.

The optimum place is when the task is slightly more challenging than the current skill level of the student.

Based on: Csíkszentmihályi (1991), Darling-Hammond & Bransford (2005), & Pink (2009)

6 Insure student are skills with a repertoire of digital tools

Increase student choice, production, and creativiity by ensuring students are literate in using a range of technology tools.

Agency with Digital Tools

Genre	Consume/ Use	Experience/ Interact	Create/ Produce	Collect/ Analyze	Communicate	Organize/ Manage
Type of application, software, or platform	• Browse and search • Digital assessments • Digital content • Digital media (newspapers, magazines, thesaurus, books, encyclopedia, dictionaries, etc.) • Location/GPS apps • Online research • QR Codes	• Adaptive assessment • Adaptive learning • Digital advisors • Learning/content management systems • Serious games • Simulations • Virtual courses/ learning • Virtual worlds	• Augmented Reality • Coding • Construction tools • Digital content creation • Digital Portfolio • E-book production • Game creation • Makerspaces • Mapping • Media capture/ production • Modeling • Music and video tools • QR coding • Slide presentations • Visualization • Word processors	• Data export/import (API) • Databases • Makerspaces • Spreadsheets • Surveys/Polls • Tracking progress/ goals over time • Visualization (i.e., image capture, visual design, charting, video editing)	• Blogging • Chat rooms • Email • Online collaborative workspaces • Online communities • Online meeting spaces • Social media • Texting • Video conferencing • Webinar • Website	• Digital calendars • Digital clocks and timers • Digital curation • Digital reminders • File system • Learning or content management systems • Manage devices • Organizer apps • Playlists • Social bookmarking

7 Establish a Data Culture

Create an expectation that students will cite evidence for their work using data and research.

Positions on Issues Using Data/Evidence

https://learn.teachingchannel.com/video/digital-age-civic-engagement-edda

Tracking Progress Using Data/Evidence

ASSESSMENT

Why Student Data Should Be Students' Data

Students can make gains in taking ownership of their work when they're given access to their data around that work.

By Dennis Li

December 11, 2017

©Shutterstock.com/wavebreakmedia

https://www.edutopia.org/article/why-student-data-should-be-students-data

Empowerment through Data/Evidence

Federal Data & Visualizations

https://usafacts.org/
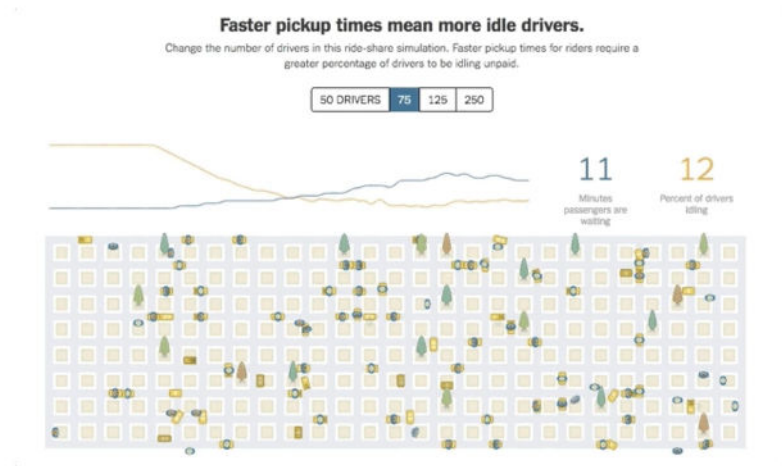
Empowerment through Data/Evidence

9. Uber wait times

This interactive graphic of a city street shows how the number of drivers idling nearby affects wait times for passengers. Viewers can choose from 50–250 drivers nearby to see how wait times and number of idling drivers changes.

Faster pickup times mean more idle drivers.

Change the number of drivers in this ride-share simulation. Faster pickup times for riders require a greater percentage of drivers to be idling unpaid.

| 50 DRIVERS | 75 | 125 | 250 |

11
Minutes passengers are waiting

12
Percent of drivers idling

What this interactive graphic does well is give a really clear overview of how many cars have to be present for low wait times. This is an easy way to support the thesis of the article and makes a much more visceral impact than just saying that you need, say 125 cars idling for an eight minute wait time. **Interactive data visualizations like this are a great way to convey a message and make an impact with abstract data.**
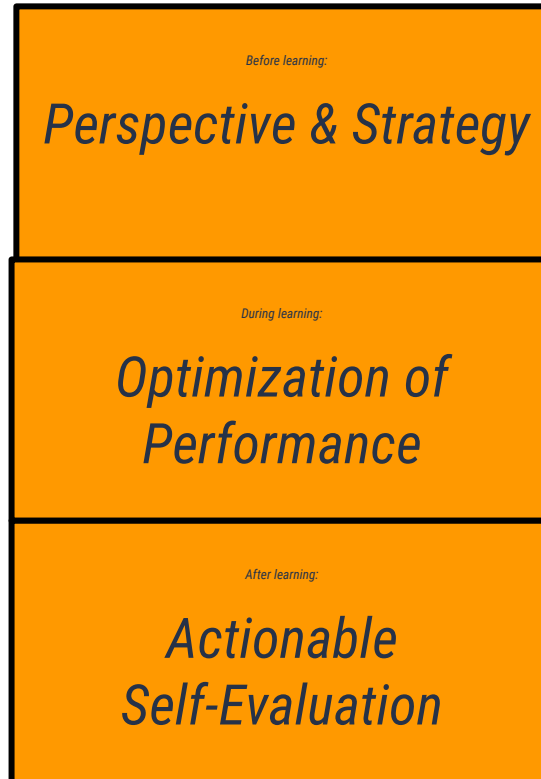
New York Times Interactive

https://getdolphins.com/blog/interactive-data-visualizations-new-york-times/

C Recap

Definition

Students have agency whenever they self-reflect and then act or interact intentionally to influence their learning experiences.

Elements

Before learning:

Perspective & Strategy

During learning:

Optimization of Performance

After learning:

Actionable Self-Evaluation

Pathway Strategies

1. Promote intellectual Risk-taking
2. Explicitly teach self-direction
3. Redesign learning to enable student agency
4. Teach both surface and deep learning
5. Align task complexity with skill level
6. Repertoire of Digital Tools
7. Empowerment through Data and Evidence
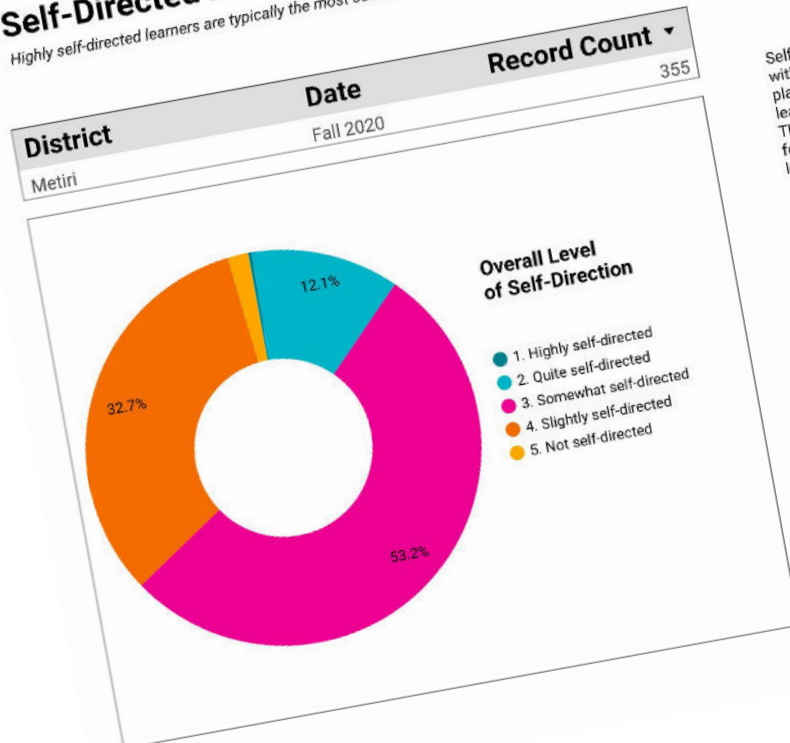
What is Student Agency?
Why is it so important now?
How do teachers empower student to be agents?

How do you measure it?

Measuring Self-Direction

- Scale of 1-5
  - Perspective and Strategy
  - Optimization of Learning
  - Actionable Self-Evaluation

Sample Report:
https://datastudio.google.com/u/1/reporting/7e7dc9df-3375-4f60-851d-d55646b60e4b/page/RDpwB

C How do you measure self-direction

- Metiri's Self-Directed Learning Inventory (SLI)
  - Grades 5-12
  - 15 to 18-minute online assessment
  - 40+ questions addressing all 4 constructs
  - Administer pre- and post-assessments for trend
    - Compare by student ID
  - Reports (by school and by grade level)

Questions?

clemke@metiri.com

Student Agency

4 Elements of Self-Direction

Before learning:
Perspective & Strategy

Believes in self

Seeks clarity

Has choice

Sets goals

Plans & anticipates

Finds a hook

During learning:
Optimization of Performance

Establishes place

Avoids distractions

Self-regulates

Self-instructs

Seeks help

Exercises voice/choice

After learning:
Actionable Self-Evaluation

Compares to standard

Takes ownership

Sense of accomplishment - Shares results

Uses voice

Evaluates/Adjusts

Student agency emerges when self-reflective and intentional actions or interactions influence and shape the student's learning.

Enabled and empowered through self-efficacy

What is your greatest need as you learn?

Go to www.menti.com and use the code 3958 3048

https://www.menti.com/aln9v5j32dmw

METIRI Group

Rank by importance for your learning.

Select as many as you want in the order you prefer. There are 4 options in total.

1st

Select an option

Submit