

# SCARFE digital sandbox

## Planning & Assessment Redesigned

<http://scarfedigitalsandbox.teach.educ.ubc.ca/>

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# Triangulation of Data

## Observations

- Assessment checklists
- Anecdotal notes

General-Gen-Connect-Data-Collection - Assessment - Tracking Form Teacher:

Consistent  Sometimes  Never

General-Gen-Connect-Data-Collection

Students	Mathematical Practices	Problem Solving	Reasoning	Communication	Connections	Number Sense	Notes



## Conversations:

- Between peers
- With the teacher

Making  
Student  
Thinking  
Visible



## Products

- Students work
- Student thinking recorded



## **Objectives: At the end of the session, TCs will:**

- Know 3 strategies to support formative assessment
- Consider digital tech integration options
- Have additional resources for their 'toolkits'

## **Following this session**

- Blog post with links to resources
- Gearing up for Practicum
- Consult - email support

# Burning Questions



12 questions

0 upvotes



# Revised Curriculum = Revising Assessment

- Who are my learners? Collectively & Individually
- How will my students be involved in assessment & learning?
- What tools or tech will I use to support an holistic approach?
  - Are there ways to better support students?
  - Are there ways to make my job more efficient?



"Students can learn without grades, but they can't learn without timely, descriptive, timely feedback."

Rick Wormeli in Education Week Teacher



# Unpacking formative assessment

5

	Where the learner is going	Where the learner is	How to get there
<b>Teacher</b>	Clarifying, sharing and understanding learning intentions	Engineering effective discussions, tasks, and activities that elicit evidence of learning	Providing feedback that moves learners forward
<b>Peer</b>		Activating students as learning resources for one another	
<b>Learner</b>		Activating students as owners of their own learning	

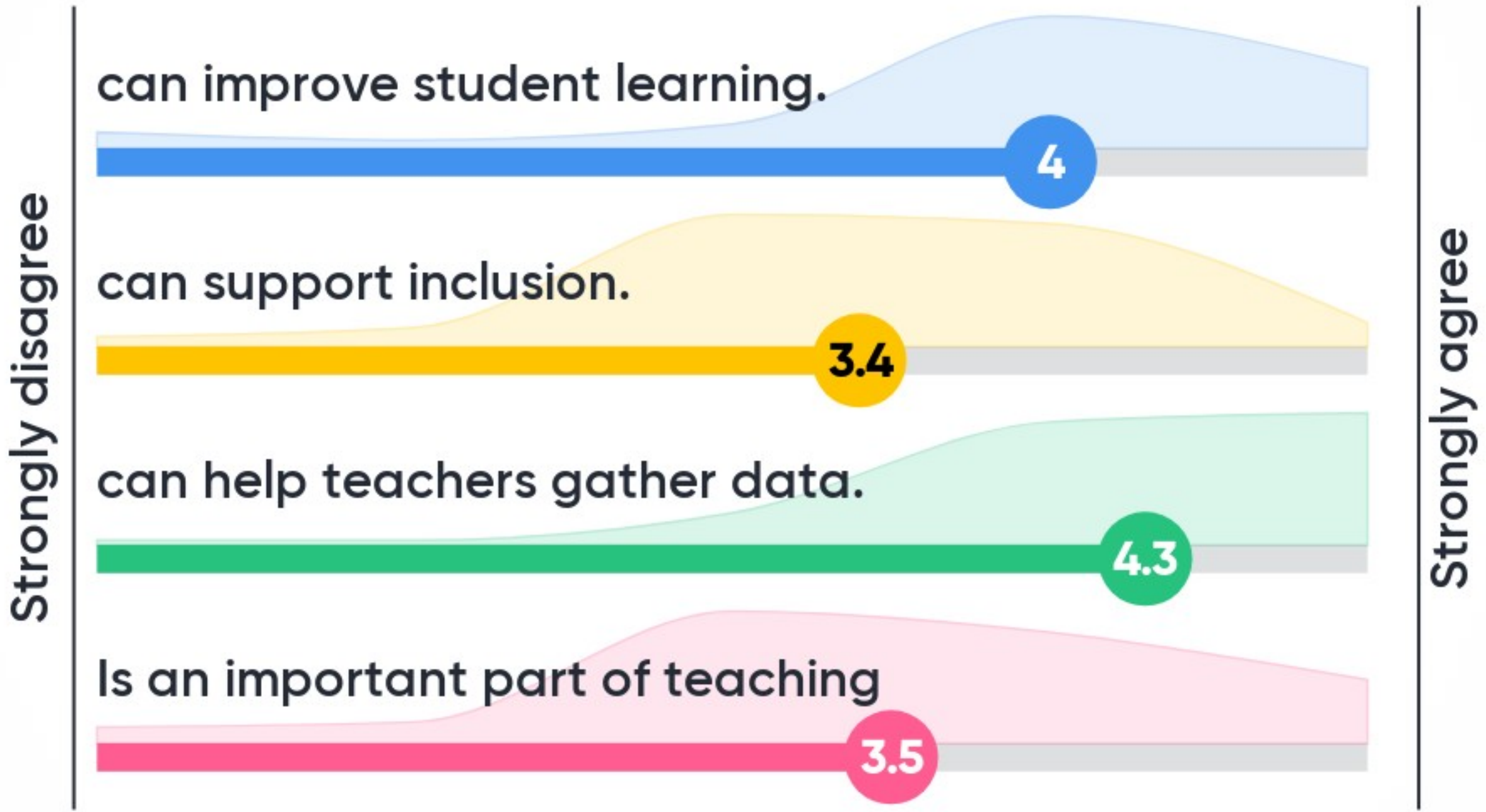




## Formative Assessment Strategies

- Discussion Warmup
- Peer Instruction
- Agile teaching

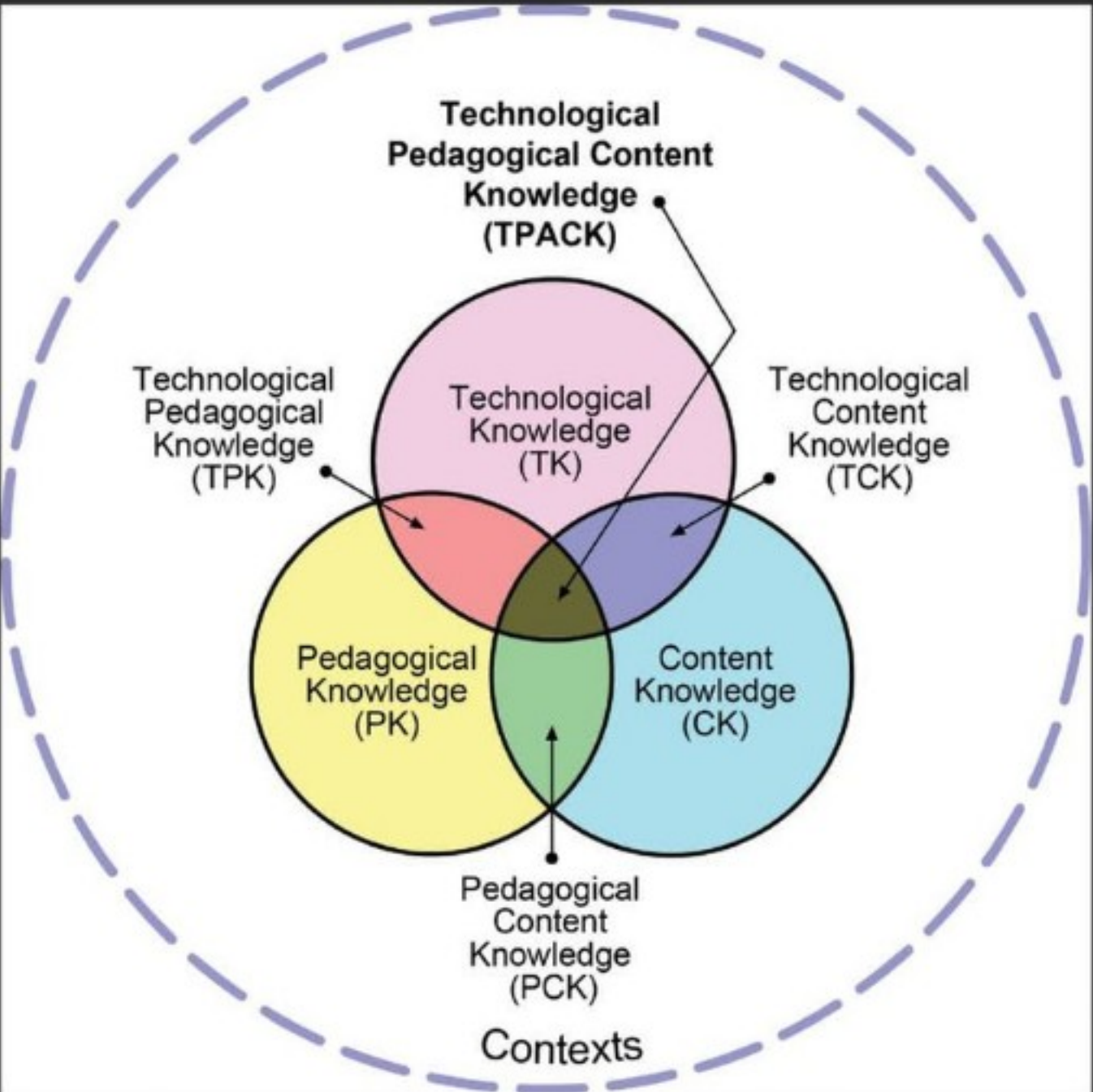
# Integrating digital technology...





# TPACK

What Pedagogical and Content Knowledge do I possess that will inform the use of digital technologies?



# MyEducationBC.info

- Attendance
- Individual Education Plans IEPs
- Gradebook
- Email
- Parent & Student Portal
- [\[http://bvcs.ca/docs/Family\\_Portal\\_Brochure.pdf\]](http://bvcs.ca/docs/Family_Portal_Brochure.pdf)

Teacher Classes						
Previous		Wednesday, November 23			Next	
Classes Meeting	Attendance	Posted	Grades	Posted	Email	
1 - MEN--11-03 - ENGLISH 11			<input type="checkbox"/>		<input type="checkbox"/>	
1 - MPE--10G-02 - PHYSIC...			<input type="checkbox"/>		<input type="checkbox"/>	
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10 - MEN--10-06 - ENGLISH 10			<input type="checkbox"/>		<input type="checkbox"/>	
2 - MCOM-11-01 - COMMUNI...			<input type="checkbox"/>		<input type="checkbox"/>	
2 - MCOM-12-01 - COMMUNI...			<input type="checkbox"/>		<input type="checkbox"/>	
3 - MEN--10-02 - ENGLISH 10			<input type="checkbox"/>		<input type="checkbox"/>	
4 - MEN--12-03 - ENGLISH 12			<input type="checkbox"/>		<input checked="" type="checkbox"/>	



Smithers Secondary 2016-2017 Staff View ▾

*Shi, Mehta*

Pages | My Info | **Student** | Attendance | Gradebook | Planner | Assessment | PD | Tools

### Student List

Details | **Options ▾** | Reports ▾ | Help ▾ | Search on Name     a-z   

Contacts

### 5.3.1 Options

The **Options** menu is an action centre. This is where a user can initiate actions on the data that is displayed on the screen. In some cases, the list of items may show an arrow, indicating additional options.

**Options ▾** | Reports

- Send Email...
- Query...
- Snapshots...

Pages

My Info

Student

Attendance

Gradebook

Planner

Assessment

PD

Tools

## Student List

Details

Contacts

Attendance

Conduct

Academics

Transcript

Assessments

Schedule

Membership

Transactions

Documents

Options ▾

Reports ▾

Help ▾

Search on Name



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0 of 189 selected

<input type="checkbox"/>	Name	NextSki > Name	Alerts	Gender	Pupil #	PEN	Photo	YOG	School > Name
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<input type="checkbox"/>	<a href="#">Alzahran, Ruiman</a>	Smithers Secondary		F	484908	126254051	<a href="#">View</a>	2020	Smithers Secondary
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<input type="checkbox"/>	<a href="#">Arikado, Fosahastian</a>	Smithers Secondary		M	609682	123180820	<a href="#">View</a>	2018	Smithers Secondary



# Smithers Secondary 2016-2017

Staff View ▾

Shi, Mehta

- Pages
- My Info
- Student**
- Attendance
- Gradebook
- Planner
- Assessment
- PD
- Tools

## Student List

Details

Contacts

Attendance

Conduct

Academics

Transcript

Options ▾ Reports ▾ Help ▾ Search on Name 🔍

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- BC Homeroom List w. Desig
- BC Homeroom List w. Grid
- BC Student Information with Photo
- Report Cards - Interim IB MYP Report Card
- Report Cards**
- Quick Chart
- Quick Report

0 of 193 selected

Pupil #	Homeroom	School > Na
2125080	MASS UPDATE	Smithers Sec
Report Cards - Kindergarten, Primary, Intermediate		
<b>Report Cards - Middle Years and Secondary</b>		

Class Attendance :: 2016-2017 - MPHE-09G-02 - PHYSICAL AND HEALTH EDUCATION 9- GIRLS



Class Input Options Reports Help Search on Name

Seating Chart

Period 1

Post

Attendance for: 11/17/2016

Printer Friendly Version | Design Mode

<p>Thayapran, Sukhinders Present</p> <table border="1"><tr><td>A</td></tr><tr><td>L</td></tr><tr><td>P</td></tr></table>	A	L	P	<p>Bret, Chudel Present</p> <table border="1"><tr><td>A</td></tr><tr><td>L</td></tr><tr><td>P</td></tr></table>	A	L	P	<p>Dysseinnck, Jaleena Present</p> <table border="1"><tr><td>A</td></tr><tr><td>L</td></tr><tr><td>P</td></tr></table>	A	L	P	<p>Abdulhao, Jocelyndustin Present</p> <table border="1"><tr><td>A</td></tr><tr><td>L</td></tr><tr><td>P</td></tr></table>	A	L	P
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## Discussion based strategies

- Randomized responses followed by volunteers
- Turn & talk, then respond
- Poll, Display graphic, turn & talk/small group discussion or debate, 'retake' poll
- Voting
- Video or image as a prompt

## Discussion Warmup Strategy

- Be sure to provide sufficient time for response.
- Increases thinking and engagement.
- Provides teacher with data to help guide discussion.

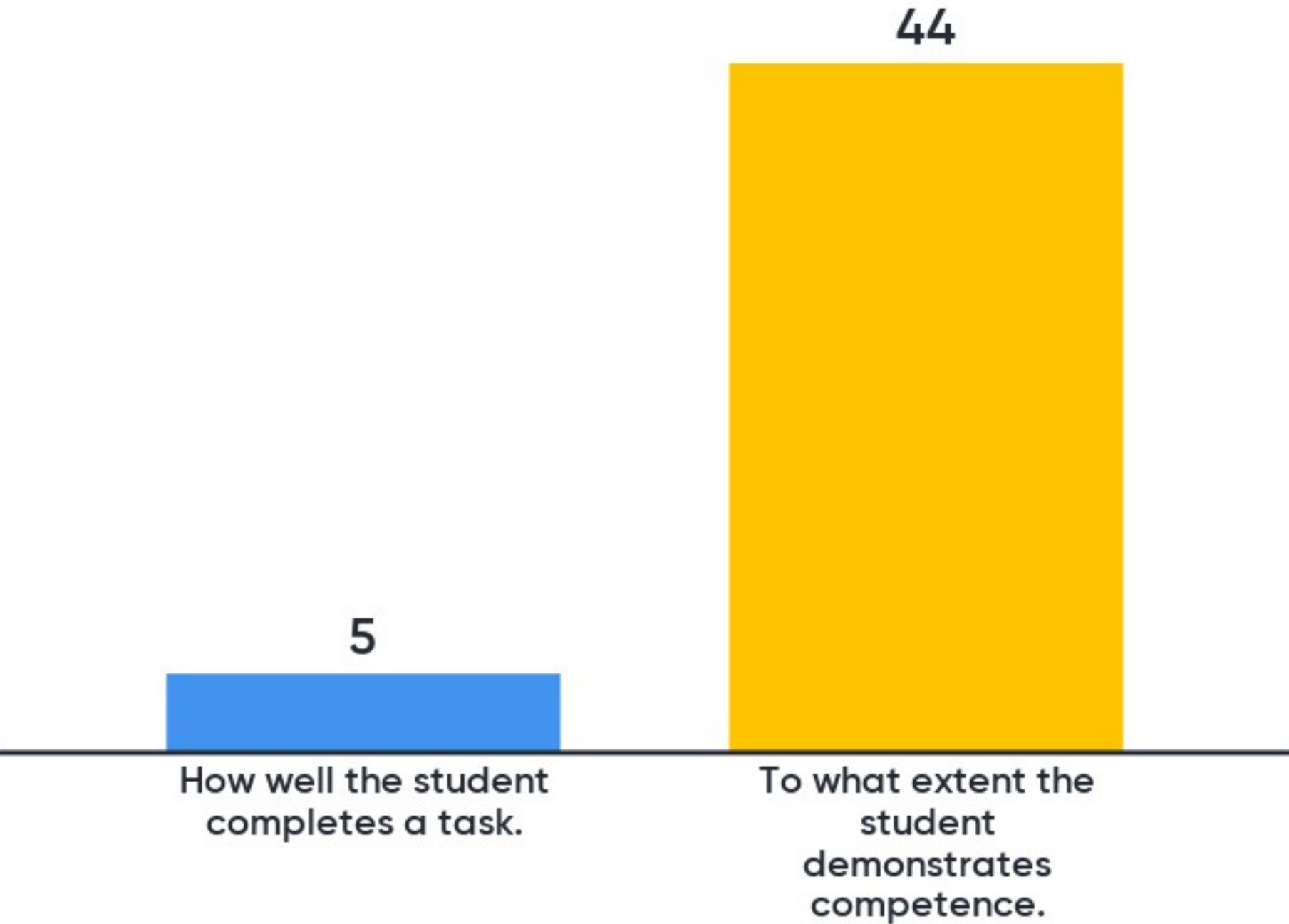





## KDU Model - Competency based

- Understand - big ideas
- Know - Curricular Content
- Do - Curricular Competencies

# Competency based assessment shows us:







Proficiency Scale	Emerging	Developing	Proficient	Extending
	The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning.	The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.

## Find the Right 'system'

Considerations:

- Context
- Access to technologies
- BYOD policies
- T & Ss needs

The right system might not be digital

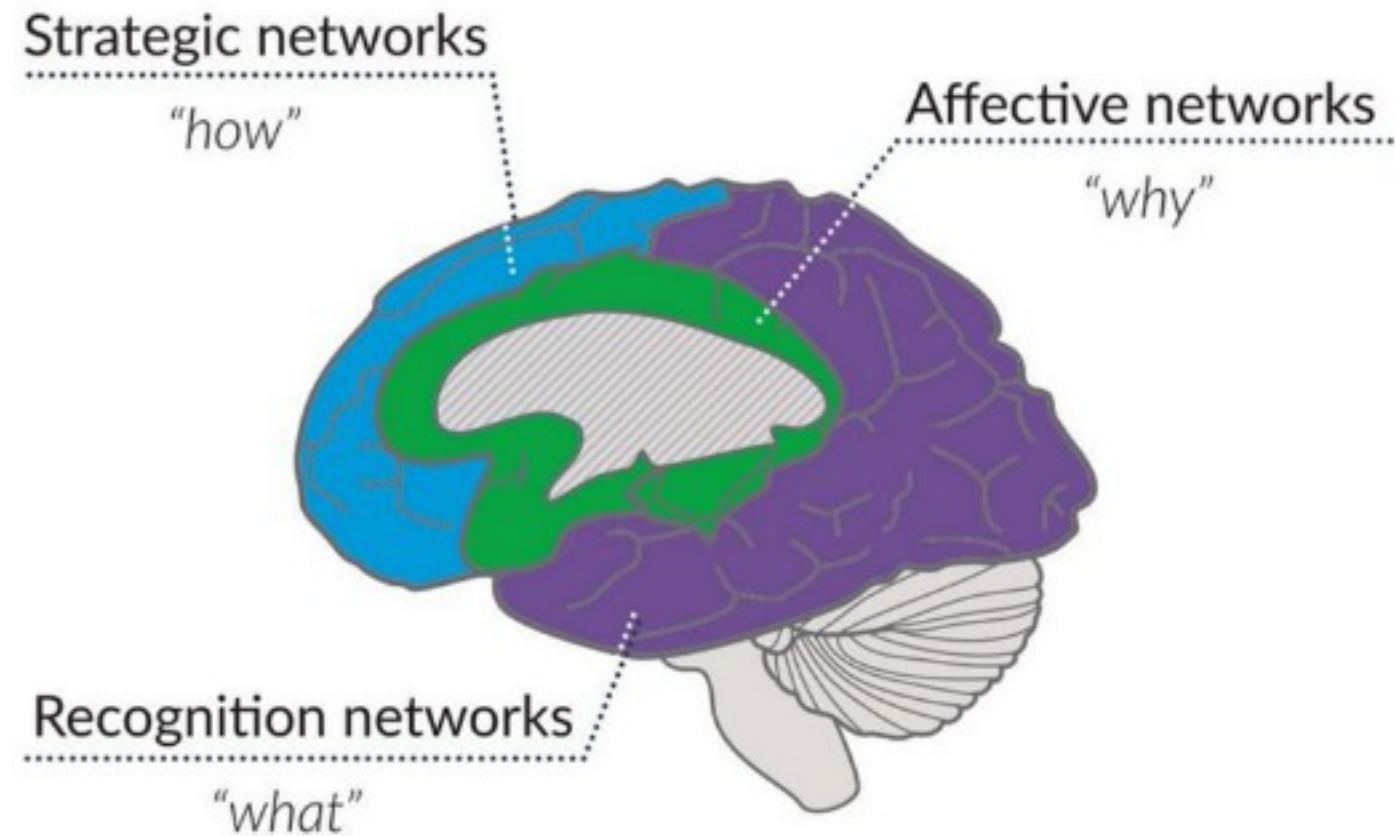
Planning for frequent assessment is not optional...



# Universal design for learning refers to:

1. Designing learning for optimal engagement;
2. Planning for the success of all learners;
3. Providing variety, choice and options.





## UDL Universal design for learning

- Multiple means of representation
- Multiple means of expression
- Multiple means of engagement



Unit Big Idea: Exploring stories and other texts helps us understand ourselves and make connection to others in the world.		Communicating Student Learning			
		AE	MM	M	FM
<b>Goal: I know that literary elements in story and text by:</b>					
Objective	identifying that stories can have a problem				
Strategies: Connect to conflict/problems to life, accessible text					
<b>Goal: I can respond to text in personal, creative &amp; critical ways by:</b>					
Objective	Making a comment, connection or question about a text				
Strategies: Accessible books about high interest topics and written at appropriate reading level visuals of possible responses					
<b>Goal: I construct meaningful personal connections between myself, other texts and the world by:</b>					

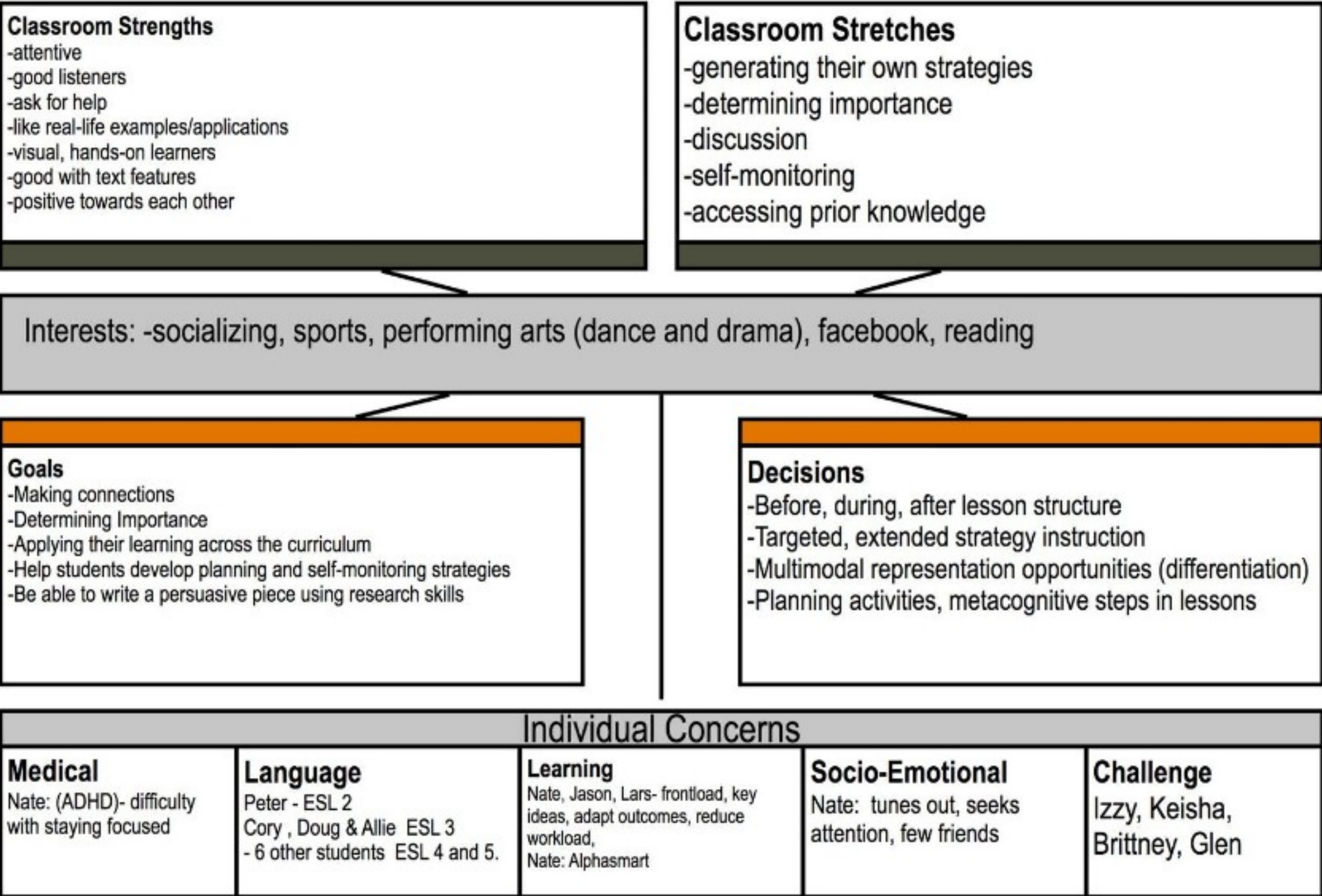
# Know your students

- Class profile
- Learner profile
- Plan for all
- IEP

# How do we do it? First step...

- “Knowing your learners, is foundational to designing curriculum,” (Childre, 2009)
  - Not prescriptive
  - Not one size fits all
  - Planning for our class needs to represent their unique ecology
  - Figuring out all the ‘colours’ in the class!





Course/Subject/Grade(s): Ceramics & Sculpture 10-12		Planning Team: Kate Campbell & Shelley Moore				
Unit Guiding Question: How can we understand and share stories of the Pre Columbian era through the creation of traditional ceramic vessels?						
		ACCESS: This is what I <u>need</u> to know and do	ALL: This is what I <u>must</u> know & do	MOST: This is what I <u>can</u> know & do	FEW: This is what I <u>could</u> know & do	CHALLENGE: This is what I <u>can try to</u> know & do
<b>Content Goal(s): I know a range of sculpturing materials and processes</b>		I know the materials I need to make a model	I know how to make a model using clay  I know how to apply a surface treatment process	I know how to use additive processes using clay	I know how to use subtractive processes when using clay	I know how to incorporate different glazes or stains to my model
<b>Goals</b>	I can explore and create by creating artistic works collaboratively or as an individual using imagination, observation, inquiry and ideas	I can explore possible models to create a draft plan	I can create a model using observation	I can add to a model using new ideas	I can add to my model using my imagination	I can add to my model using inquiry
	I can connect and expand by creating a meaningful artistic work that demonstrates an understanding and appreciate for cultural contexts	I can create a model that represents an animal	I create a model that represents ideas connected to a cultural context	I create a model that represents a story of a cultural context	I create a model that represents a metaphor of a cultural context	I create a model that represents the artistic influence on the cultural context





## Check ins

- Are students learning?
- How do you know? How do they know?
- What could be improved?

# Gamification and anonymous response







# Mentimeter

- Free unlimited participants
- Limits # of questions per presentation (7)
- Multiple question types and response views.



# Selection Questions, rapid response



 **Plickers**



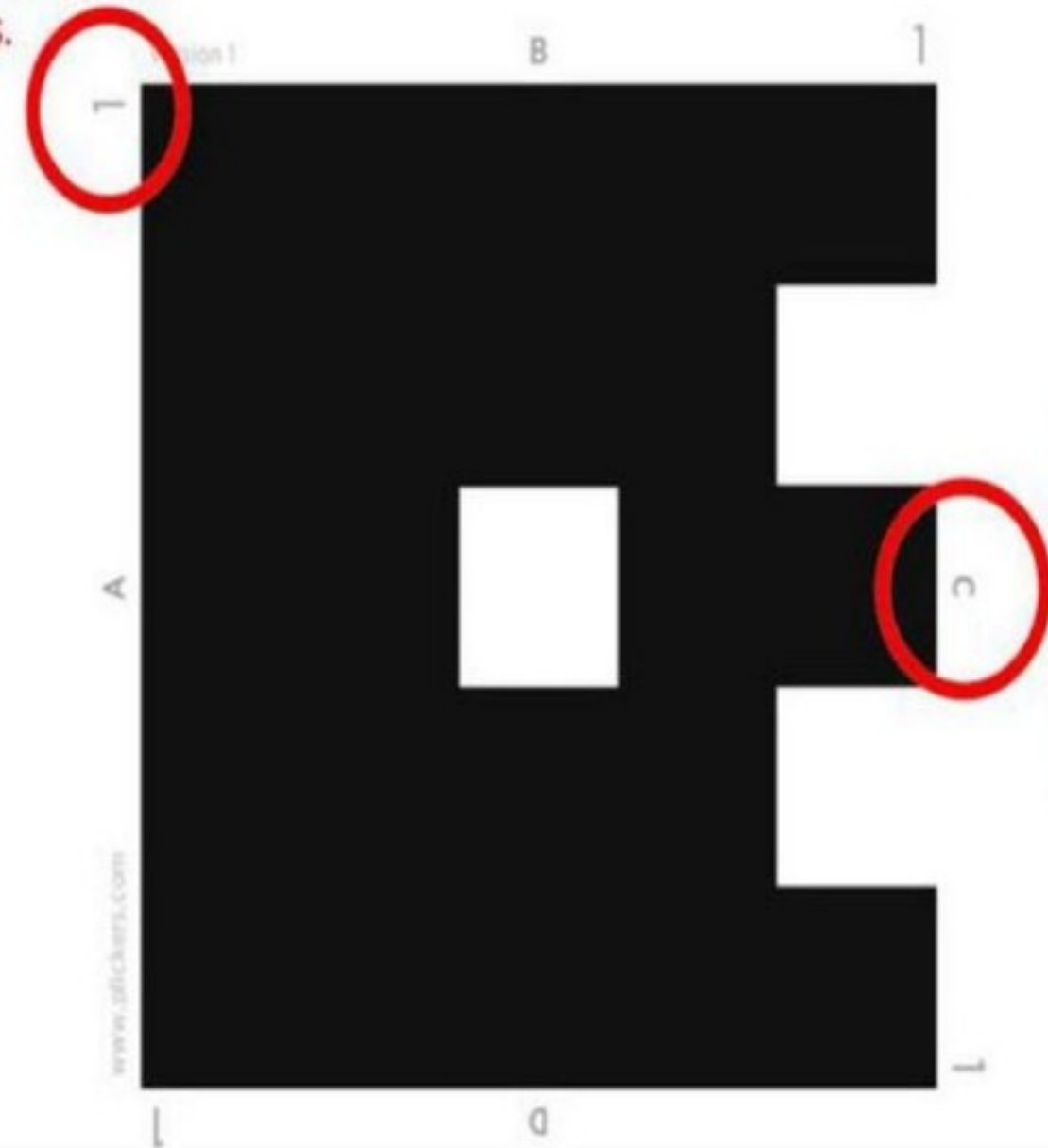
**iClickers → Ed Library Loaners!**



# PLICKERS

A high access and 'low' tech-needs digital response system

Numbers at the corners of the answer card will correspond with assigned student numbers.



Letters around the perimeter of the card indicate the direction that students should hold them up to record answers.



# You see... I see...

Plickers Library Reports Classes Live View Cards Help Ms. Fezz...

Sciences 7-1

Which layer of Earth's atmosphere contains the ozone layer which is responsible for the absorption of the Sun's UV radiation?




A: Troposphere  
B: Stratosphere  
C: Mesosphere  
D: Thermosphere

Show Panel Full screen

Mentimeter

Total: 5 (of 10)

Nolan Amy	Ariana Cris... B				
Nic Hansen	Jerry Kim C				
Satoko Lom	Alex Monroe B	0	4	1	0
Armando Pe... B	David Xue B	A	B	C	D
Rob Atkins	Anika Erdalati				



✓



Filter by class:

Social Studies

Math

Music

PE

Archived Reports

Jul 16, 2015 ● Social Studies

Correct: 15%

How many quarters are in a dollar?

- A 4
- B 1
- C 3
- D



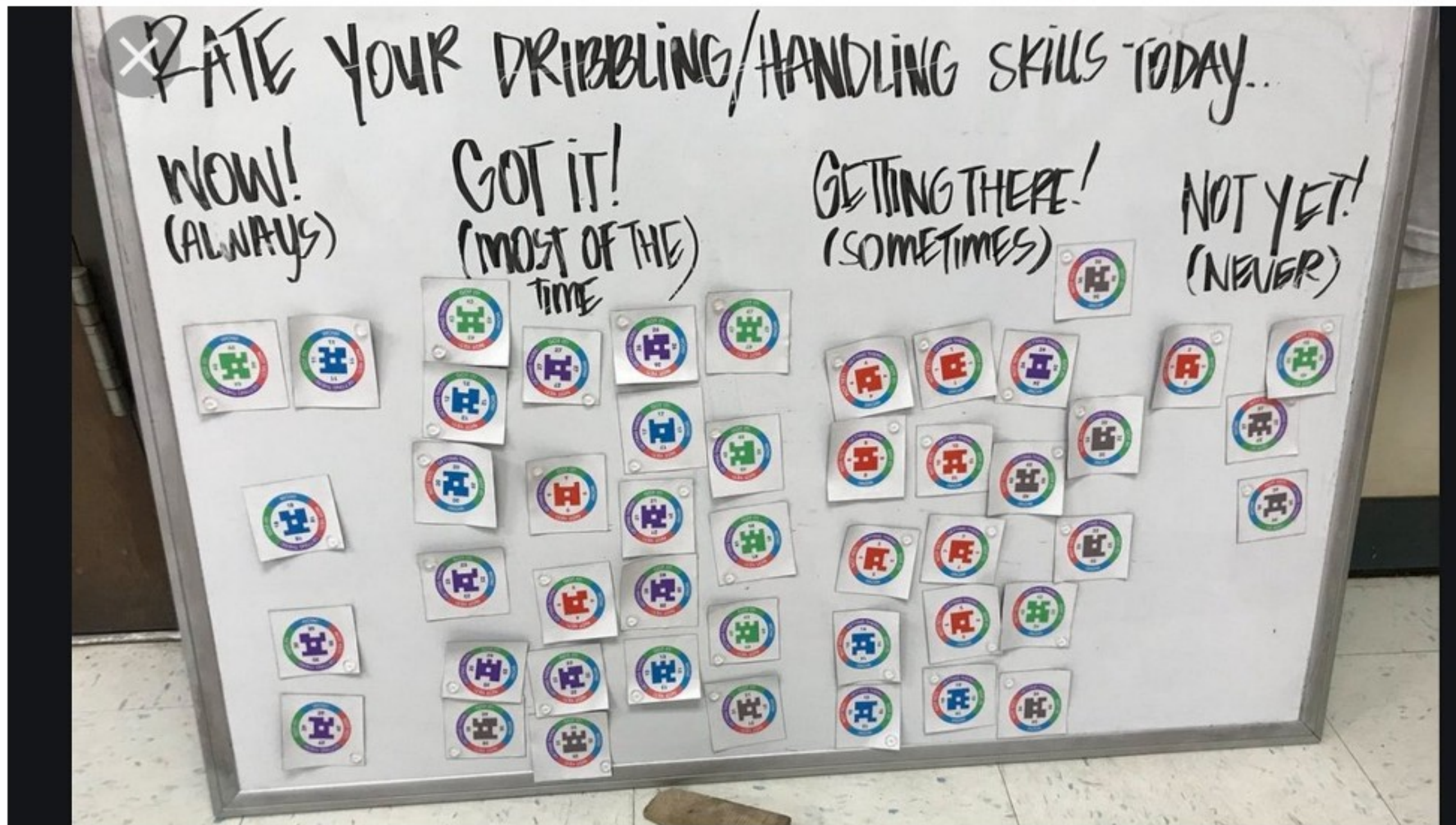
Jul 14, 2015 ● PE

Correct: 0%

What is the capitol of New York?

- A New York City
- B Albany
- C Brooklyn
- D Syracuse





polling - sticky notes, magnet cards, 'plagnets'



GradeCam ID

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1. (A) (B) (C) (D) (E)

2. (A) (B) (C) (D) (E)

3. (A) (B) (C) (D) (E)

4. (A) (B) (C) (D) (E)

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1	1	1
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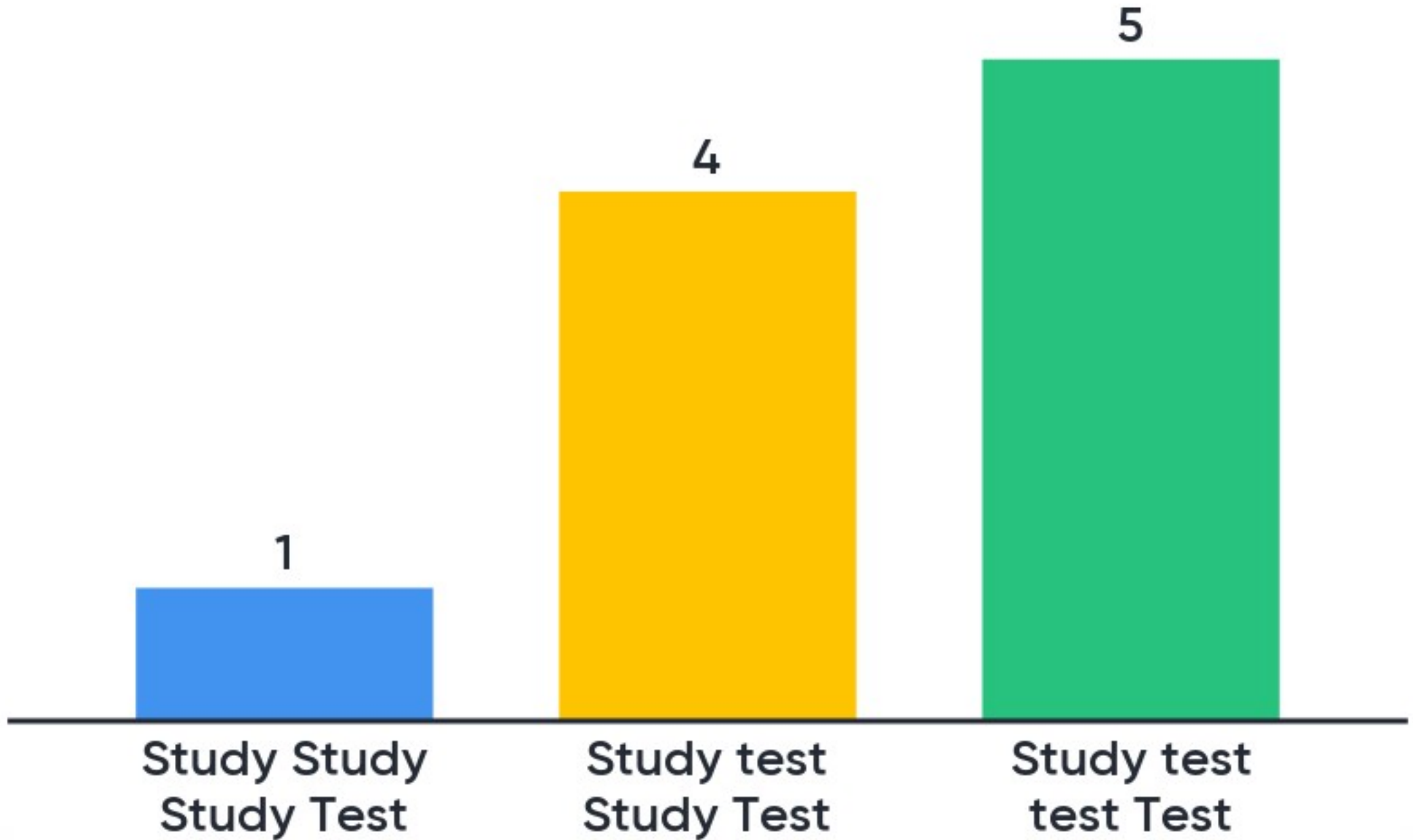
# Scantron - ex gradecam

## Peer Teaching Strategy

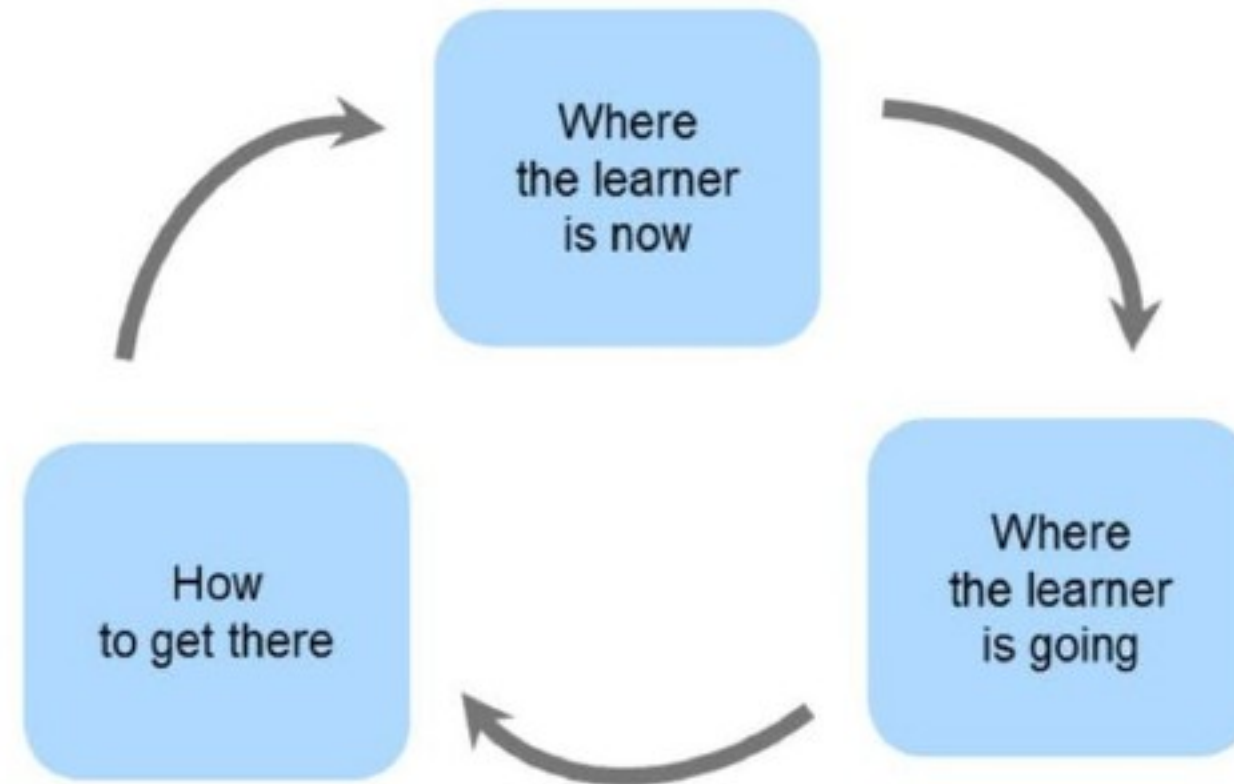
- Question posed,
- anonymous data revealed
- Peer discussion
- Re-vote
- Data guides follow-up class discussion & teaching



# Which approach might best support retention?



# Assessment for Learning



**Study, test, test, test ✓**

Frequent low to no stakes  
questioning and feedback can help  
shape students' thinking - who  
benefits?



# Make Thinking Visible

- Anonymous response
- Graphical display provides immediate feedback
- Provide opportunities to review and revise response
- Rapid response to activate and assess prior knowledge

## The Value of Testing

1. We often think we know things which we have in fact forgotten. This is the *Illusion of Knowledge*.
2. Testing provides excellent feedback on what we have forgotten.
3. Testing provides *retrieval practice* which improves our ability to bring information to mind when we need it.
4. Ideally, testing should be low, or zero stakes. High stakes testing can cause anxiety which sometimes reduced the benefits of testing.

@LearningSpy 2016



# Ask effective questions



- To cause thinking and provide information to the teacher (and learner) about what to do next
- To collect information to inform teaching



# Questioning for Formative Assessment

**Table 4.1:** Common Errors in Questioning (from G. Brown & Wragg, 1993)

Asking	Failing to
<ul style="list-style-type: none"><li>• too many questions at once</li><li>• a question and answering it yourself</li><li>• questions only of the brightest or most likeable</li><li>• a difficult question too early</li><li>• questions in a threatening way</li><li>• irrelevant questions</li><li>• the same kind of questions all the time</li></ul>	<ul style="list-style-type: none"><li>• correct wrong answers</li><li>• indicate a change in the type of question</li><li>• give students the time to think</li><li>• pay attention to answers</li><li>• see the implications of answers</li><li>• build on answers</li></ul>



- Define competencies
- Map the learning objectives that support each competency
- Determine activities and assessments that promote student learning that are **authentic** (i.e., scenarios reflecting what students would actually do in practice) and that are feasible to administer



# Assessment Tool: Single Point Rubrics

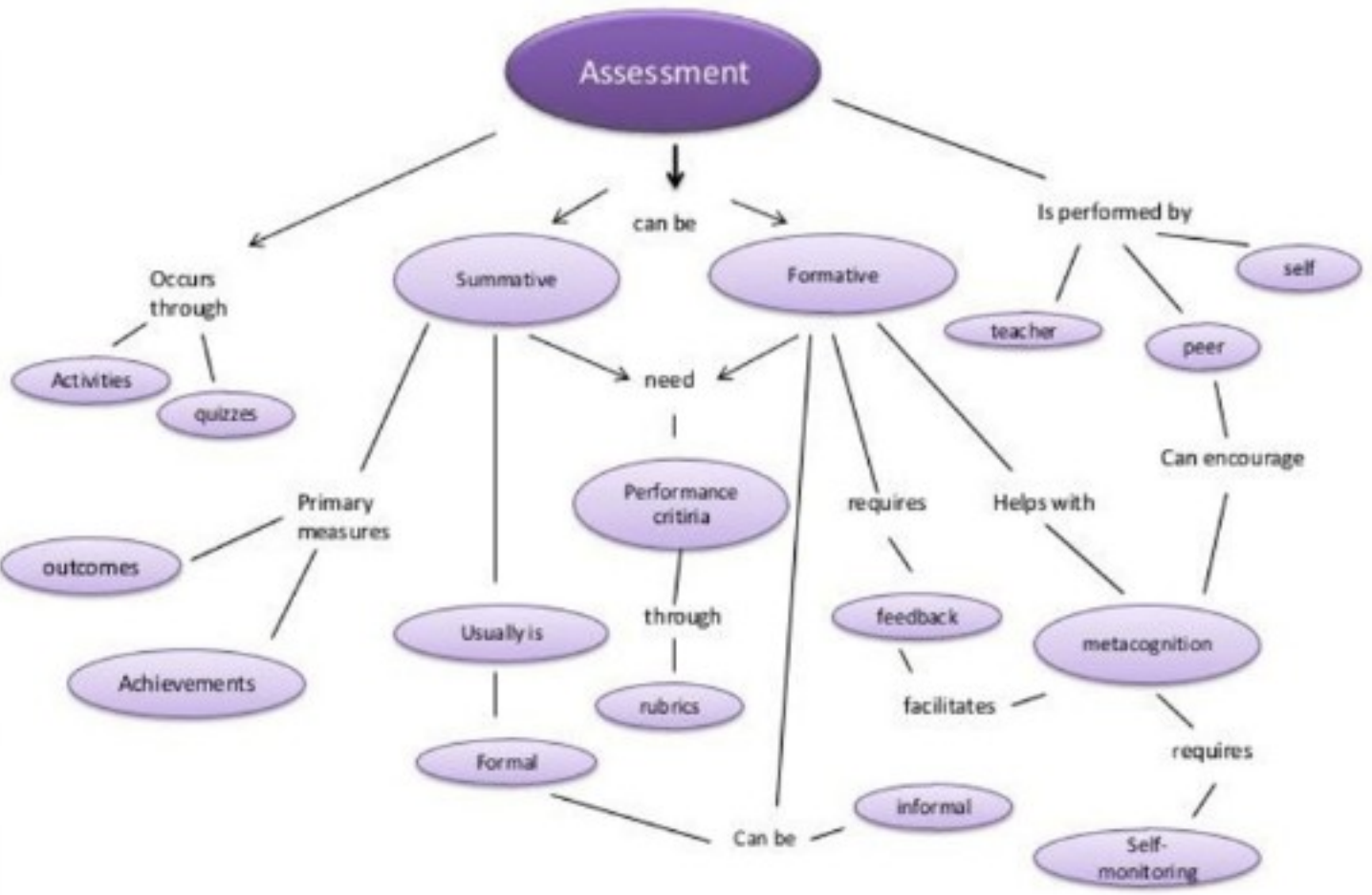
I can make a connection between an Aboriginal story and something I have experienced.

Think About...	Criteria	Evidence
Is Shi-shi etko really sad? Maybe she's lonely, worried, anxious...	My connection is about a <u>character, feeling, or event</u> in the story.	Your connection is about a feeling: sadness. This can be a great strategy for understanding characters.
	My connection includes <u>important details</u> about my personal experience.	You told us how it was frightening to leave your home to move to Canada. You told us who, what, where, when, and why.
How would you feel? Why? How does your experience help you understand Shi-shi etko's perspective?	My connection helps me <u>empathize</u> with the story's characters.	

# One point rubric

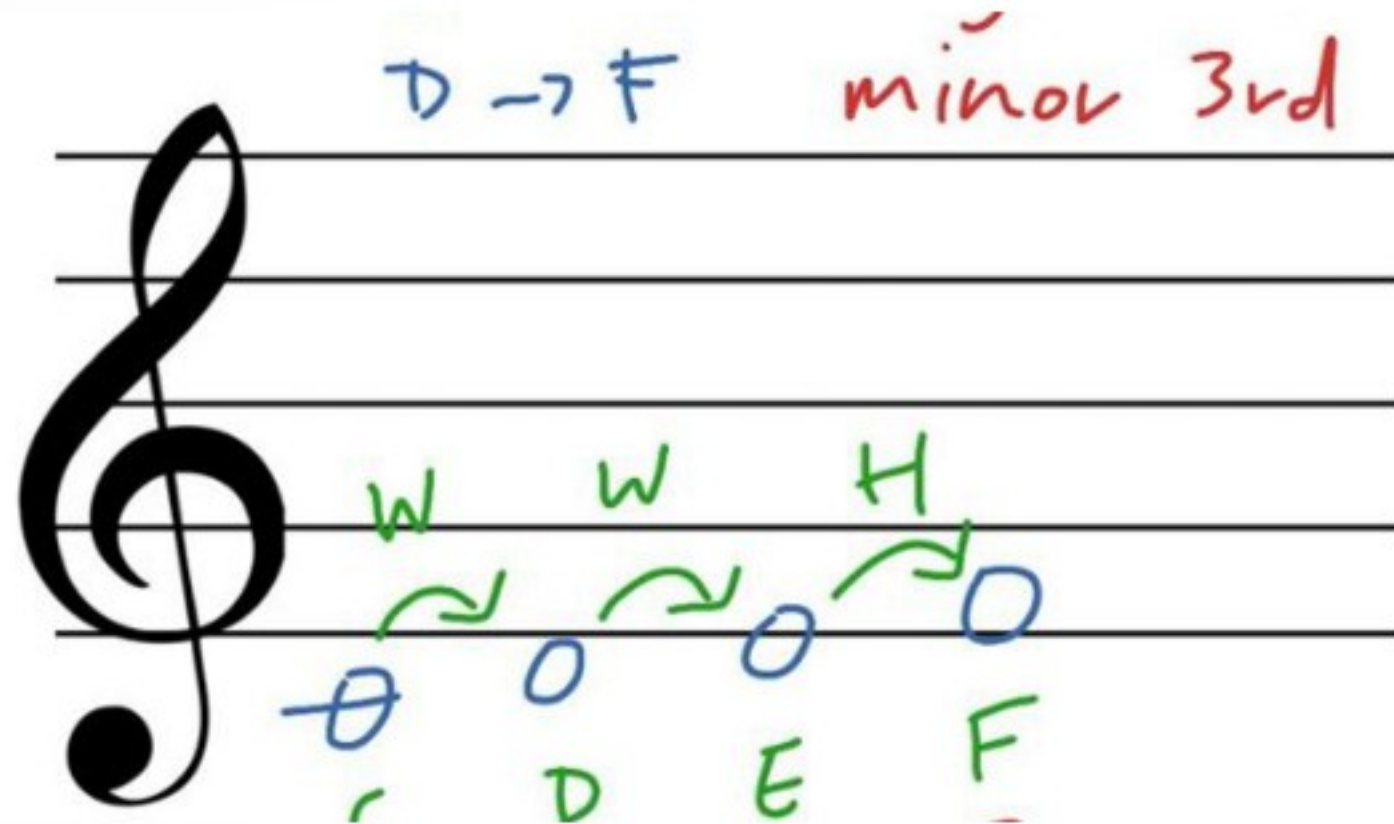
Name:		Date:
Unit Guiding Question(s):		
My Goals for this Unit	Evidence of my Learning	What is my next step?





# Concept mapping

- visualize connections
- critical thinking
- insert media, links, text



## ShowMe

- multimodal response
- supports ALL learners
- embed text audio, image, video and drawing







## Agile or Contingent Teaching Strategy

Gather data and vary instruction based on student needs.

Ex. Student responses lead to T introducing a focused discussion or video, follow-up questions to probe/ prompt & extend learning



# Take aways? Questions for followup?

# References

- Beatty, I.D. & Gerace, W.J. *J Sci Educ Technol* (2009) 18: 146. <https://doi.org/10.1007/s10956-008-9140-4>
- Wiliam, D., & Leahy, S. (2015). *Embedding Formative Assessment: Practical Techniques for K-12 Classrooms*. Learning Sciences International. Retrieved from <https://books.google.ca/books?id=1ifZrQEACAAJ>

## Additional Resources:

Frey, N., & Fisher, D. (2011). *The Formative Assessment Action Plan: Practical Steps to More Successful Teaching and Learning*. ASCD. Retrieved from <https://books.google.ca/books?id=BR3xJ4LZCqoC>

Goldstein, D. S., Wallis, P. D., & Rhem, J. (2015). *Clickers in the Classroom: Using Classroom Response Systems to Increase Student Learning*. Stylus Publishing. Retrieved from <https://books.google.ca/books?id=nbCpCwAAQBAJ>



**How might digital technologies be integrated to support varied learners?**

