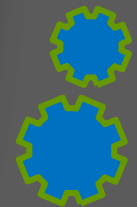




Pupil Inquiry

Placing the Learner in the Middle
Moving to a Preferred Space & Place
where Pupils have more Ownership
for Their Learning



Agenda – Day 2

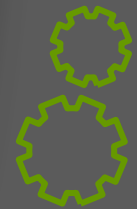
1. Review Yesterday – Questions? (Chat Box)
2. Introduction to Pupil Inquiry
 - What it is
 - How it differs from PCI
 - Teacher Pedagogies supporting Pupil Inquiry
3. Co-Developing a School-Based Inquiry
4. Sharing
5. Reflections: What is the Learnings?
6. Next Steps –Where to Now?

Process

We will Pause to Engage, Invite your Feedback & Questions, & Reflect

This includes using:

- Chat Box
- Q & A
- Polls
- Break Out Rooms
- Feedback Survey



Why Engage Pupils in Inquiry-Based Learning?

“Engagement should not be viewed simply as a precursor to academic achievement... students would likely benefit from school policies and practices that increase their sense of belonging and participation.” (William, 2003)



Norwegian Direction

- Stimulate stamina, curiosity and motivate a desire of pupils to learn
- Expand on the Framework for Basic Skills:
 - oral skills, reading skills, writing skills, digital skills, numeracy skills
- Make informed choices
- Develop identity and ethical, social and cultural competencies
- Develop digital competencies as a tool for learning
- Develop digital judgement
- Understand digital developments and digital arenas

Strategi for inkluderende oppvekst i Holmestrand barnehage-grunnskole-sfo-voksenopplæring

Planen utarbeides 2019-2020 og innføres med virkning fra august 2020. I prosessen har alle nivå i organisasjon medvirket; ansatte i barnehage, sfo, skoler og voksenopplæringen. Ledere på alle nivå. Politisk behandling våren 2020.

Planen gjelder 0-16 år, skal sikre god overgang til vgo og livslang læring.

Helhet og
sammenheng

Digital kompetanse
Språklig kompetanse
Livsmestringskompetanse

Digital kompetanse
Språklig kompetanse
Livsmestringskompetanse

Digital kompetanse
Språklig kompetanse
Livsmestringskompetanse

Kompetanseplan
for Holmestrands
barnehager

Desentralisert ordning
Digitalisering og dybdelæring – Holmestrand
(videreføres i ny kommune)
Tidlig innsats – tilpasset opplæring –
Spesialundervisning – Sande kommune
(avsluttes høst 2019)

Rammeplan

Fagfornyelsen

Overordnet del
Læreplaner

Norskopplæring
Grunnskoleopplæring
Spesialundervisning

Barnehage


Grunnskole m/sfo

Voksenopplæring

Being Clear on the Goals for all Learners



What do we want?



**How will we know
we were successful?**

PISA 2018 Results Volume V (2020) - Norway



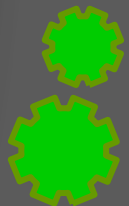
- Scored high in terms of technology and infrastructure
- Teachers know how to leverage the technology, pupils can use effectively
- Less access to creative extra curricular – positively correlated with increases in reading
- Pupils had less access to a room for extra help staffed by teachers and/or peer helpers
- Do collect pupil data, less gathering of pupil input and public sharing of pupil data
- Pupils appear to have less ownership of their own learning
 - <http://www.oecd.org/pisa/publications/pisa-2018-results-volume-v-ca768d40-en.htm>

As the School Leadership Team



In 5 words or less, what is important for pupils to learn by the time they leave your school?

Break: Discuss and put responses in the Chat Box



What is important for your pupils to learn?



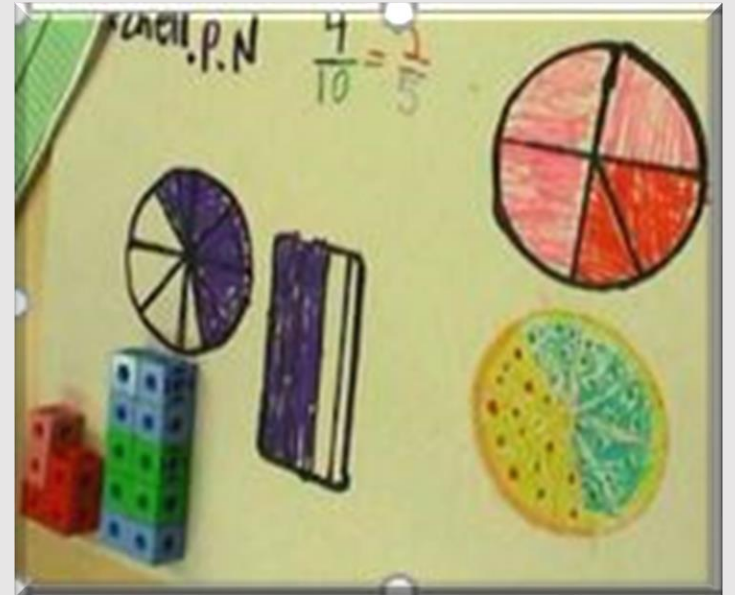
Relationships Between Inquiry Stance/Mindset, Professional Collaborative Inquiry and Student Inquiry: Similar & Different



Problem – Linear Pattern Problems

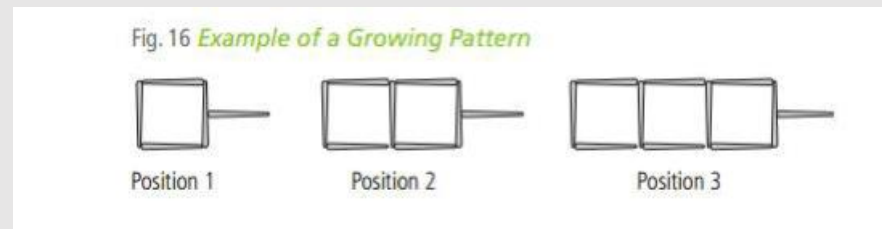


Quadratic Pattern Problems



Represent $\frac{2}{5}$ and $\frac{4}{10}$ in different ways

Toothpick Problem



Preparing Pupils for Tomorrow's World



- In Global Competency for an Inclusive World (2016) OECD supported developing skills, knowledge & understanding to apply to global issues
- Pupil Inquiry is one approach to learning & building global competency, as outlined on pages 2-5 in the Pupil Inquiry resource
- The process for Pupil Inquiry mirrors PCI Page 6 & 7 of the Pupil Inquiry resource

Creativity involves divergent thinking,
and actions leading to novel, adaptive
work.

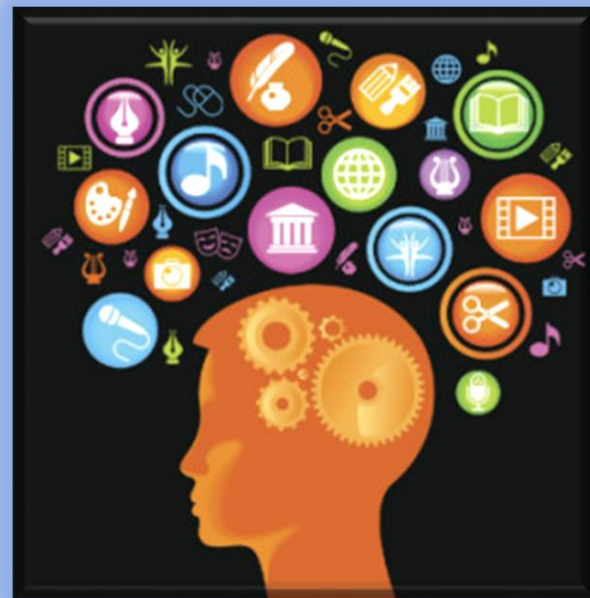
OECD, 2019: 24



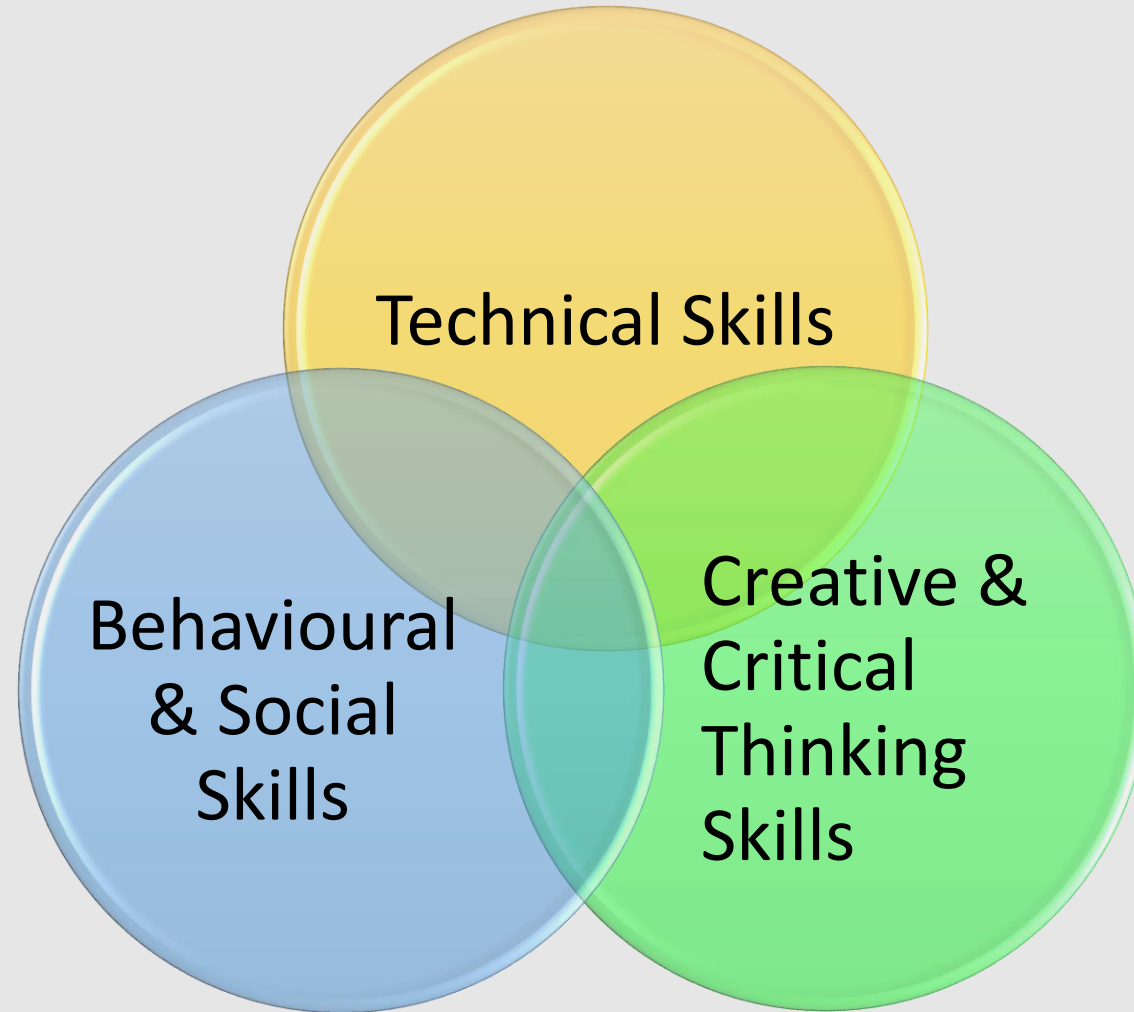
KS: Freedman, Riehl, Tylee, Wilson

“Critical thinking is goal directive, involves perspective taking, logical and rational thinking, assessing and analysing information and evidence.”

OECD, 2019: 24 -25



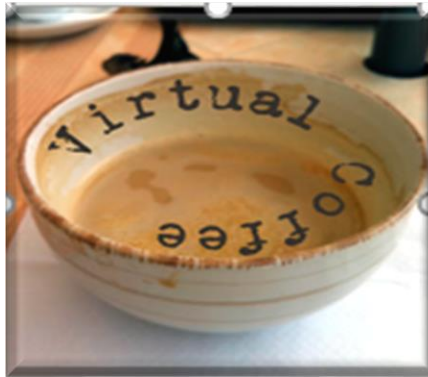
Skills for Innovation OECD, 2019: 53



Problem Solving Matrix

1	Explore in a limited way, similar situation, straightforward problems simple solutions	4	Explore moderately complex problems, identify links among components, control moderately complex digital devices, can plan a few steps ahead and adjust given a changing goal or conditions
2	Explore an unfamiliar problem & understand a small part, test simple hypothesis, solve for a single constant, monitor some progress (self-assessment)	5	Systematically explore complex problems, understand structure of problems, retrieve relevant information to find best strategy, confirm answers
3	Handle information presented in several contexts and formats, infer reasonable relationships between a few variables, they can plan ahead, monitor, devise tests to confirm or refute an hypothesis, use simple digital devices	6	Develop complex mental models of diverse problems, solve efficiently and accurately, use complex digital devices, set hypothesis, modify taking in constraints

Refer to the resources referenced;
which global competencies are
important to teach in your school



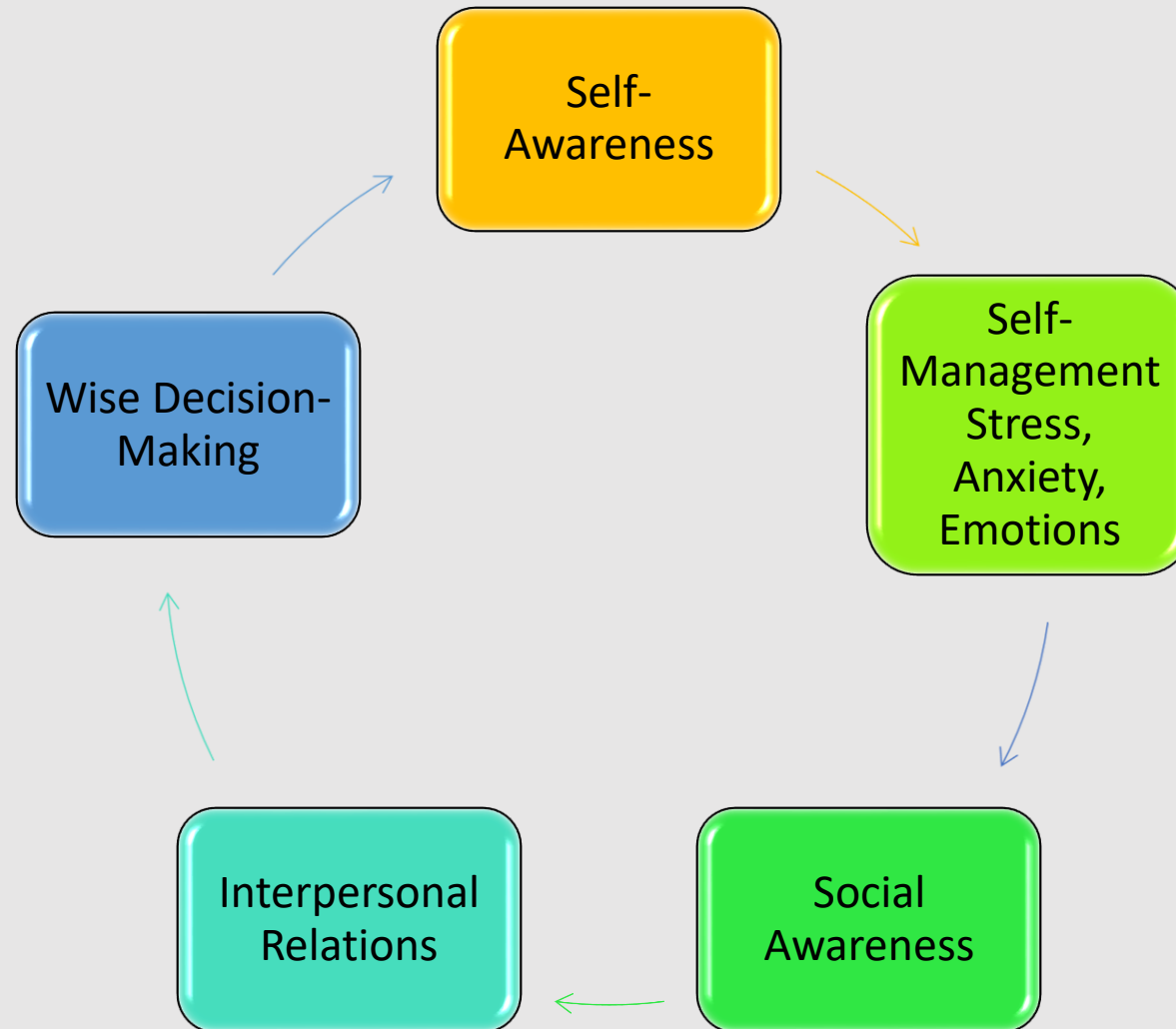
Break

Creativity & Critical Thinking for Personal and Social Well Being

- Creativity supports **'flow'**, or intense focus (Csikszentmihalyi, 1990) leading to a sense of well-being
- Critical thinking is necessary for involved and informed citizenship
- Teacher pedagogies listed from pages 1-5
- **Both involve similar processes.** (see rubric for creativity and critical thinking on page 5 Teacher Pedagogies booklet)

Social Emotional Wellness:

Dynamic Interactions Dr. Stuart Shanker



UNICEF Well-Being, Innocenti Report Card #16, 2020

(exacerbated by COVID-19)

Child Well-Being in Rich Countries:

- Good Mental Health – sense of well-being, belonging, connectedness
- Good Physical Health – obesity, exercise, play
- Skills for Life – academic competence, social skills
- “Children who have a strong sense of belonging to school have higher academic achievement” (Section3)

Rankings of Well-Being in Wealthier Nations (2020)

Norway – ranks high #3 – lower suicide rate, lower obesity, good academic skills, confident of ability to make friends & someone to count on in times of trouble.

Issues:

- Boys have a better body image than girls, Norwegian pupils do not feel involved in decision making at school
- Poverty and immigration can be equity & digital dividers
- Pupils concerned with Environmental Issues & Climate Change
- Increase in anxiety and depression

A Rubric for Engagement

Level of engagement in class	Proactively contributes to class by offering ideas and answering questions in each class	Proactively contributes to class by offering ideas and answering questions	Rarely contributes to class by offering ideas and answering questions	Never contributes to class by offering ideas and answering questions
Listening, questioning, discussing	Respectfully listens, discusses and asks questions and helps direct the group	Respectfully listens, discusses and asks questions	Has difficulty listening, discussing and does not allow others to have a turn	Does not listen with respect, argues, and does not consider others' ideas. Blocks group from reaching agreement
Behaviour	Almost never displays disruptive behaviour during discussions and activities	Rarely displays disruptive behaviour during discussions and activities	Occasionally displays disruptive behaviour during discussions and activities	Almost always displays disruptive behavior during discussions and activities
Preparation	Almost always prepared with assignments and materials	Usually is prepared with assignments and materials	Rarely prepared with assignments and materials	Almost never prepared with assignments and materials
Problem-solving	Actively seeks and suggests solutions	Improves on solutions suggested by others	Does not offer solutions, but is willing to try solutions suggested by others	Does not try to solve problems or help others solve problems
Group/partner teamwork	Completes group goals, positive attitude, all contribute equally, performs all duties assigned	Usually helps complete group goals, usually has a positive attitude, performs nearly all duties assigned	Occasionally/ some...	Does not work well with others, shows no interest in group goals, contributes little to group effort...

Inviting Learning Commons, Libraries



Learning Commons/ Library



Engagement, Compliance, Active Participation



How do we understand learning, when we observe and listen in classrooms?

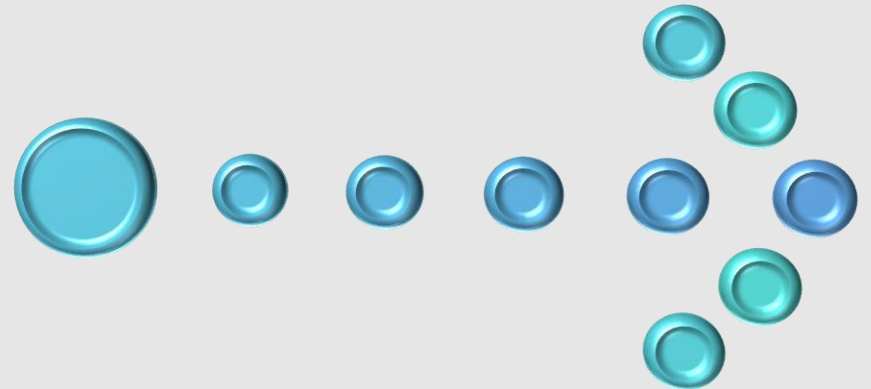
Prior Knowledge for
Application & Deeper
Learning



Imagining,
Inquiring, Doing &
Reflecting



Openness & Curiosity

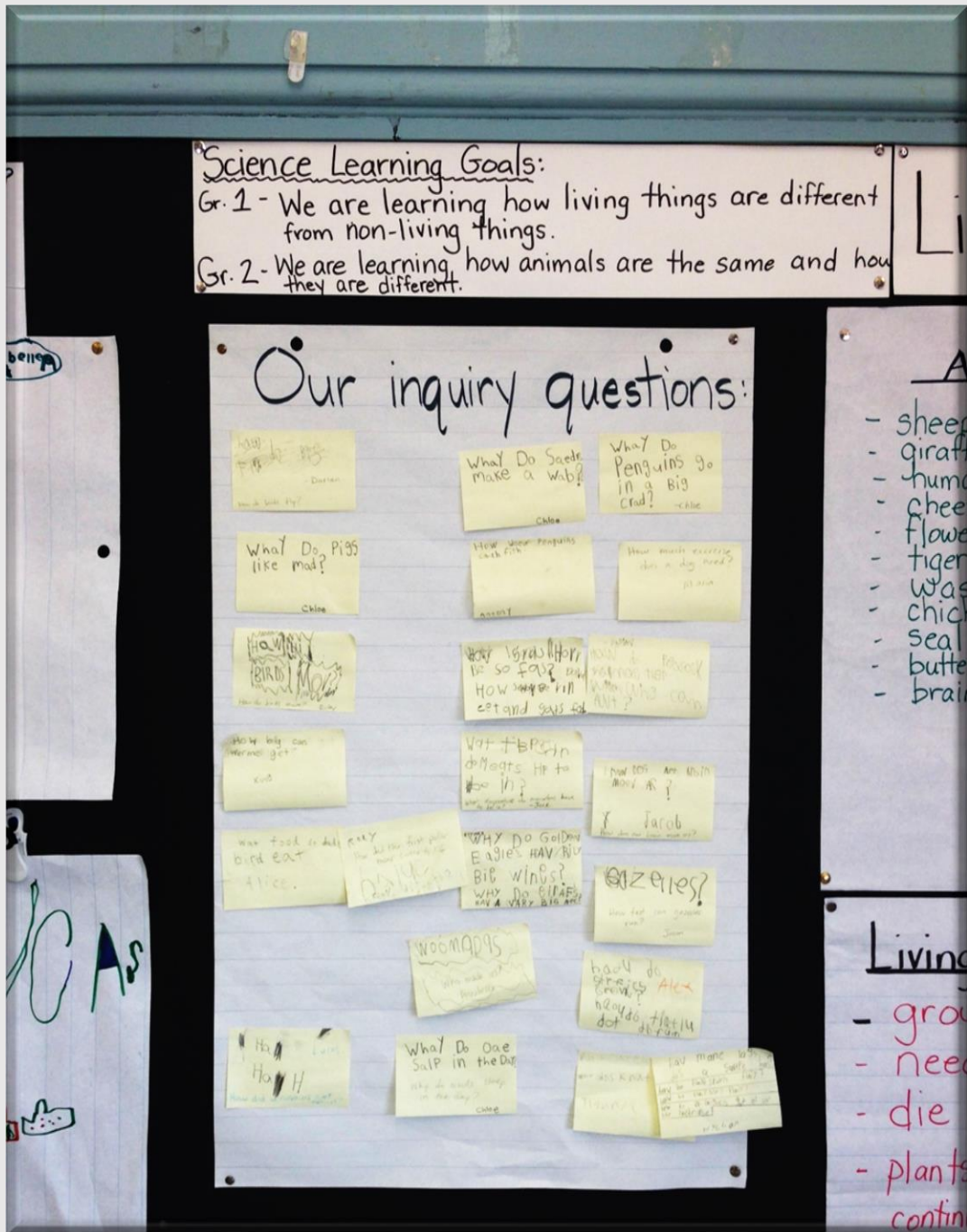


Building a Community of Learners:

Accessing Collective Wisdom & Expertise

Growth Mindset

- Co-construct
 - Co-plan
- Co-explore including the research & good practices
 - Co-gather evidence
 - Co-learn
 - Co-reflect
- Actioning back



Co-Construct,
Co-Learn
What do pupils
think?
How do you know?



Anerkjennelse

Behov for kjærlighet og for å være sammen med andre, ønske om å høre til et sted, føle seg hjemme et sted.

Sosiale behov

2. Behov for trygghet og sikkerhet, det vil si beskyttelse, føle seg trygg. Bli tatt vare på og passet på, behov for orden, regler og grenser

Trygghetsbehov

Fysiologiske behov

Behov for å overleve, det vil si behov for mat, drikke og klær



KRISTENDOM

1. Gud er
fysiske
og åndelig

2. Gud er
personlig, åndelig,
ubegriperlig,
ubegrenset,
evig

3. Gud er
en person, som
kan kommunikere
med oss

4. Gud er
en person, som
kan kommunikere
med oss

5. Gud er
en person, som
kan kommunikere
med oss

6. Gud er
en person, som
kan kommunikere
med oss

JØDEDOM

ISLAM

KRISTENDOM

1. Gud er
personlig, åndelig,
ubegriperlig,
ubegrenset,
evig

2. Gud er
en person, som
kan kommunikere
med oss

3. Gud er
en person, som
kan kommunikere
med oss

4. Gud er
en person, som
kan kommunikere
med oss

JØDEDOM

1. Gud er
personlig, åndelig,
ubegriperlig,
ubegrenset,
evig

ISLAM

1. Gud er
personlig, åndelig,
ubegriperlig,
ubegrenset,
evig

KRISTENDOM

1. Gud er
personlig, åndelig,
ubegriperlig,
ubegrenset,
evig

2. Gud er
en person, som
kan kommunikere
med oss



Planlegging

gjøre rede for sentrale
rekrutterings- og
ansettelingsprosesser i en
virksomhet

vurdere kundegrunnlaget
for en enkel forretningside
som består av hoved- og
tilleggsleveranser

utarbeide en enkel
forretningsplan i forbindelse
med bedriftsetablering

forklare og bruke begrepene
marked og markedsføring,
og utarbeide en enkel
markedsplan

vurdere ulike selskaps- og
organisasjonsformer som
benyttas ved etablering av
små virksomheter

vurdere faktorer som har
betydning for
pristfastsettelse og beregne
pris på produkter og
tjenester

utarbeide og presentere
drifts- og likviditetsbudsjett
for en liten virksomhet

gjøre rede for sikkerhetsbegrepet,
og vurdere hvordan trusler
overfor personer og bedrifters
verdier kan håndteres ved bruk av
forebyggende sikkerhetsløsninger
og beredningsplaner

gjøre rede for ulike
traffiksikkerhetstiltak

forklare hvilke sentrale
elementer som ligger til
grunn ved valg av trygge,
rasjonelle og miljøvennlige
transporttjenester

forklare hvordan bruk av
informasjonsteknologi kan
underlegge arbeidsprosesser i
små virksomheter som driver
handel, forflytning av mennesker
og leveranse av varer og tjenester

bruke relevante digitale
verktøy til
informasjonsinnhenting

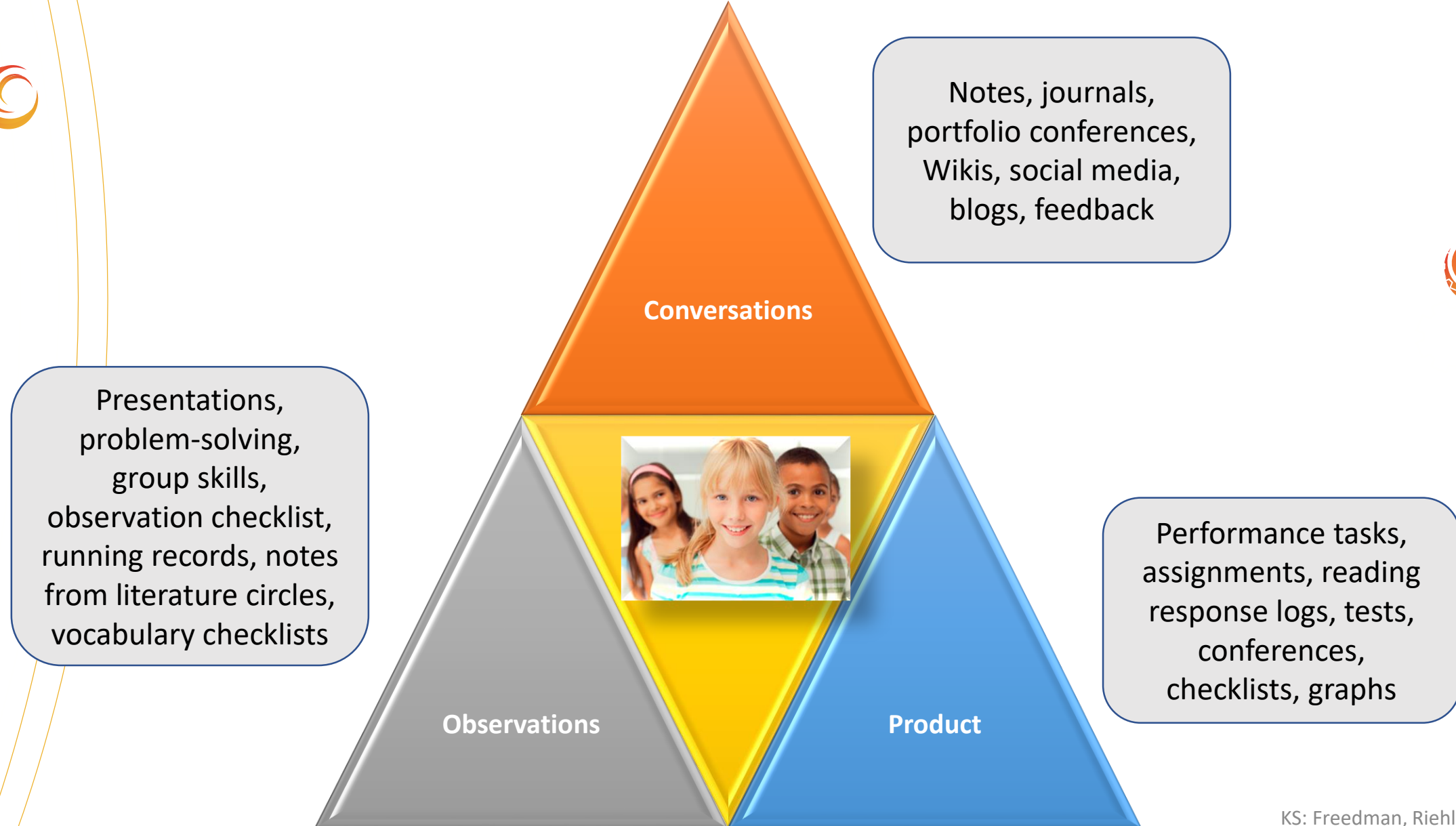
beregne kapitalbehov ved
oppstart av en liten
virksomhet, og vurdere
kostnader ved forskjellige
finansieringsmetoder

What are We Learning from Educators in the Field?

“Pupils became more metacognitive and reflective because inquiry - based learning experiences require them to be actively exploring, discovering and communicating with their peers. It was our job to bring the learning expectations to the forefront and help the students to focus on not just the experience itself, but the thinking and learning that they were engaging in along the way.”

(From a pedagogical walk – Grade 3 teacher)

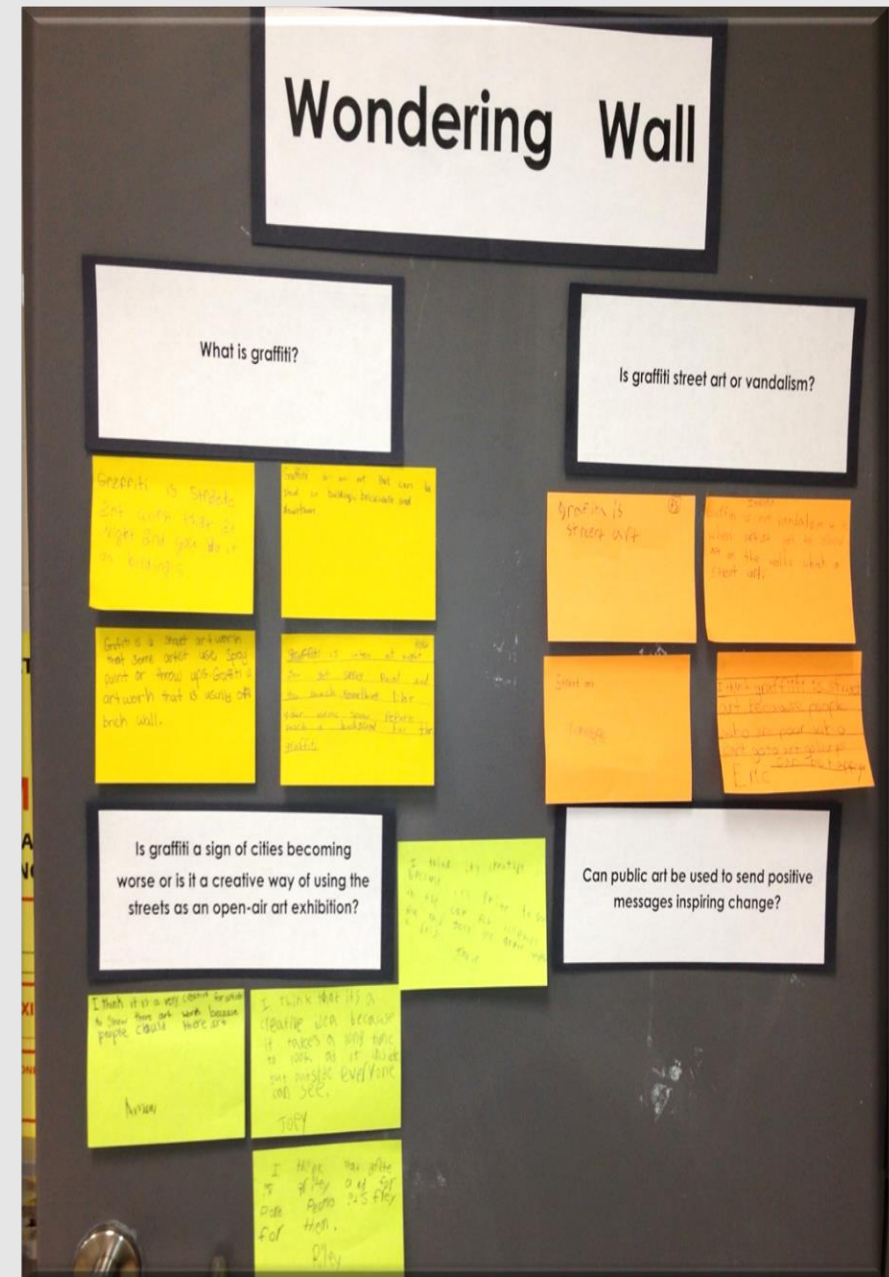
Sources of Evidence



What are students thinking and why?

Thinking is made visible and studied over time.

What do pupils learn in collective thinking and wisdom?



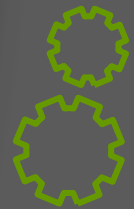
What is our current understanding that led to framing the Inquiry Question? Why?



MONITORING

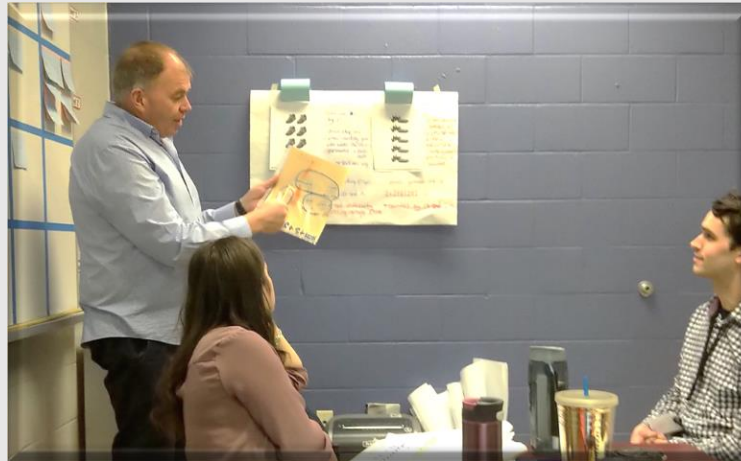


DOCUMENTATION



Documentation and Monitoring

Monitoring is the ongoing gathering, reviewing and assessment of information to track and document progress towards achieving results and goals. There are many ways to monitor. TLW & TIDE are ways to gather evidence of learning & to monitor progress. Sharing pupil work is another. Older pupils can be taught how to document their own learning.



It is a systematic process for documenting who and what you are paying attention to. This is a form of Pedagogical Documentation to make Thinking Visible.

What is the difference between data and evidence?

“Data, like colours on a palette, need a talented artist to bring them to life. Just as paint tubes provide a mechanism for portraying the flowers in the garden, data describe ideas and concepts but need wisdom and experience to give them meaning.”

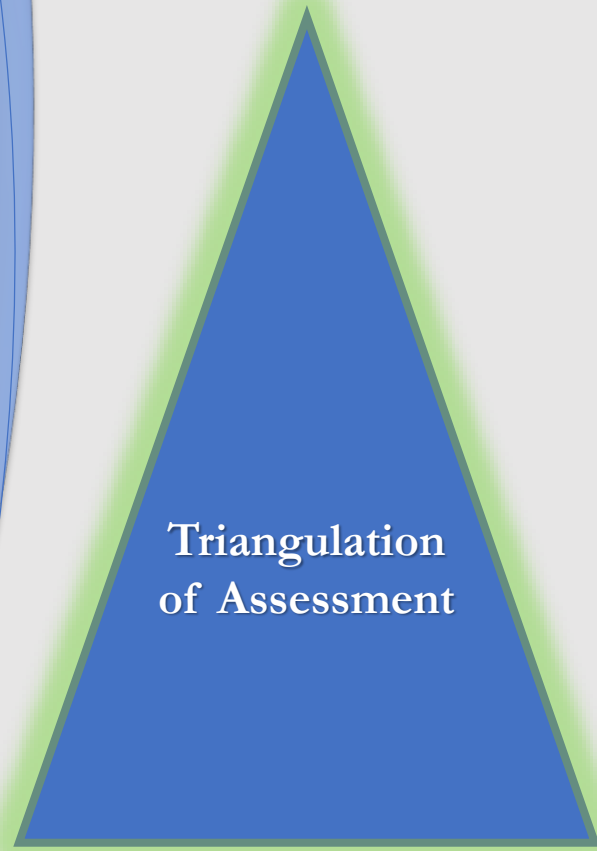


(Earl & Katz, 2006)

A Triangulation of Assessment Data

Making Thinking/Learning Visible

Observations



Conversations

Products

What is the relationship across and between our triangulation?

How can one element of our assessment data inform the other elements?

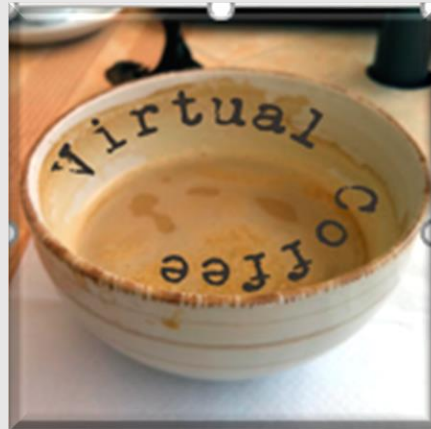
How do our observations inform products?

How do observations inform conversations?

How do observations inform other observations?

How do conversations inform products and observations?

The content and discussions make
me/we think of:



Break

Countdown to Climate Change





Evidence – What do you hear about pupil voice?

Accountable Talk

“I predict...”

“I have a question about...”

“I don’t understand...”

“That reminds me of...”

“I wonder why...”

“I found evidence to support my idea...”

“I believe this is true because...”

“I believe this is false because...”

“I agree with __ because...”

“I disagree with __ because...”

“To support __’s idea...”

“I found evidence to support __’s idea...”

“Will you tell me more?”

“Will you give me another example so that I can better understand?”

“Will you show me the place in the reading that explains your idea?”

“Will you say that again, please?”

“Please read a passage that illustrates your idea.”

“I liked/disliked __ because...”

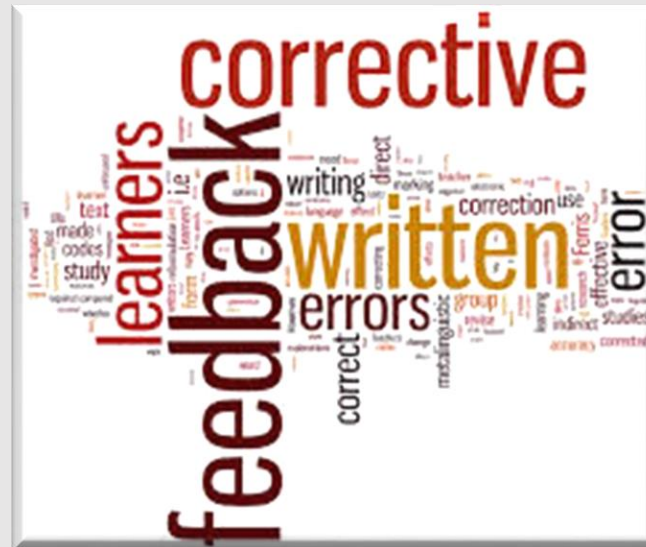
“I changed my mind because...”

“As you said...”

FEEDBACK



For leaders and teachers about impact and progress and growth. It should cause thinking.



Preparing Learners for Life

- Broaden the global competencies – well-being and sustainable living – OECD
- Academic and life skill goals
- Create virtual safe and inviting spaces for learning
- Transversal skills (Can you name a transversal skill you teach in your schools?)





Co-Developing a School-Based Inquiry

Model the process we used in the scenarios yesterday

Take an hour for these discussions

With Your Colleagues

Thinking of the learning so far and your discussions together. In your leadership teams, collaborate:

- What is the greatest pupil learning need in your school?
- How do you know? What is the evidence/data you are using?
- Once you have arrived at an area of focus, then you are going to action the inquiry
- Create a draft inquiry question. If we, then pupil learning



Operationalizing the Professional Collaborative Inquiry



- Using the template, discuss the Operationalizing the Inquiry Plan for your school. Remember this is early draft and as you progress you will have our and KS support.
- What will be your role as the leadership team? Remember **TIDE** and **TLW** are a way to gather evidence of learning and change.
- We are going to share your PCI discussions as a group, so have someone act as a recorder.
- You will be able to connect with other schools looking at similar inquiries.

Operationalizing Inquiry Plan - Modified the 9S' from New Zealand

<p>Engage</p> <ul style="list-style-type: none"> • Provocation or Question or Issue or Problem • The Indicators of Success – how will you know you have been successful? • How will you monitor? <p>Determine <i>The Why</i></p>	<p>Stimulate</p> <ul style="list-style-type: none"> • What are you curious about or want to explore about your pupils? • Is it school-wide or smaller inquiry circles? • What is the Theory of Action Question you will use: If we do, then pupil learning • What will be your indicators of success? How will you know your inquiry was successful? 	<p>Settle</p> <ul style="list-style-type: none"> • What will be your plan to meet? Where? How often? • Who is involved in the inquiry? • What are your norms for the collaboration? • How will you record what happened during the meetings? You will need some evidence of change. 	<p>Situate</p> <ul style="list-style-type: none"> • What resources will you need? • What evidence of learning are you going to measure? • What data/evidence do you have now? • What samples/examples of pupil learning will you gather? • Create your action plan.
<p>Explore</p> <ul style="list-style-type: none"> • What are the next steps? • What credible and relevant evidence can be gathered? • How can I understand, Make meaning and seek possibilities and solutions? <p>The <i>How</i></p>	<p>Share</p> <ul style="list-style-type: none"> • When you meet you bring examples/samples of pupil work to share based on the implementation of the strategy/approach/action • Will each member of the group share or will you rotate? 	<p>Scaffold</p> <ul style="list-style-type: none"> • How will you understand the changes in learning – use the indicators? 	<p>Steer</p> <ul style="list-style-type: none"> • Who is helping the inquiry team? • How are you monitoring (TLW?) and providing useful and collegial feedback? • How often is feedback provided?
<p>Empower</p> <ul style="list-style-type: none"> • Consolidate, co-create and share the learning. Knowledge Mobilization <p>The <i>So What</i> or Lessons Learned</p>	<p>Suggest</p> <ul style="list-style-type: none"> • Analysis from the samples/examples of pupil learning. What trends/changes have you seen? • What do the data say? • What has the analysis shown? 	<p>Survey</p> <ul style="list-style-type: none"> • What are your lessons learned based on the inquiry? • What will you continue and what will you consider changing? 	<p>Strengthen</p> <ul style="list-style-type: none"> • A learning fair? A way to share the inquiries among the group – hosted on KS Learning? • Knowledge mobilization to go beyond.

The Language of Collaboration

LISTEN. THEN A-B-C

Agree

"I agree
with you
because..."

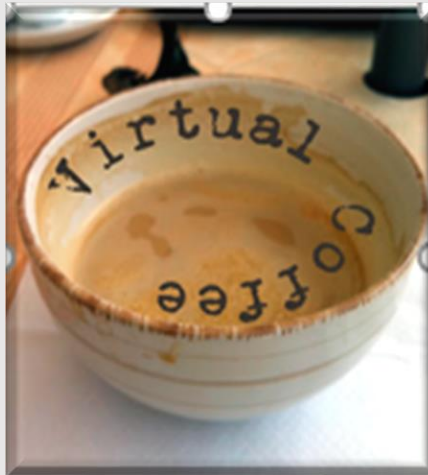
Build

"I want to
build on what
you said..."

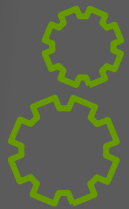
Challenge

"I'd like to challenge
your thinking..."

Planning the Professional Collaborative Inquiry



Break

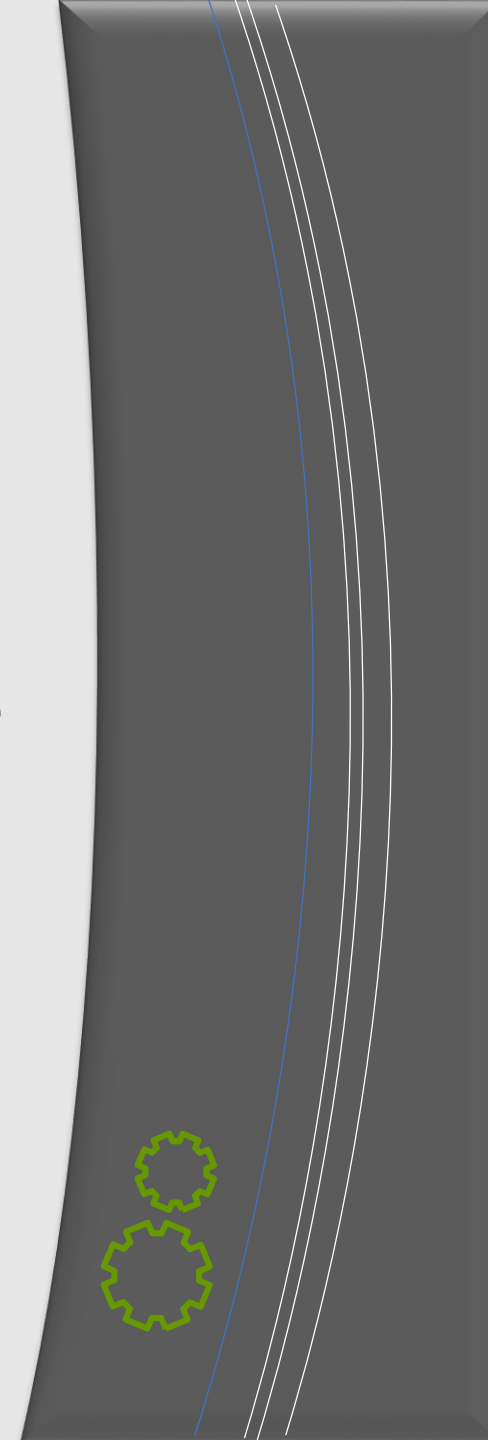



Share: One member of your group will share:

Actioning your PLC:

- What was your area of focus for supporting/increasing pupil learning and why?
- What was your “If ..., then ... question?”
- What will be your plan when you meet with your teachers?
- What will be the monitoring and follow-up?





The process, your choices, your
pupils & the local context shape the
outcomes

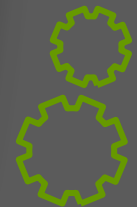
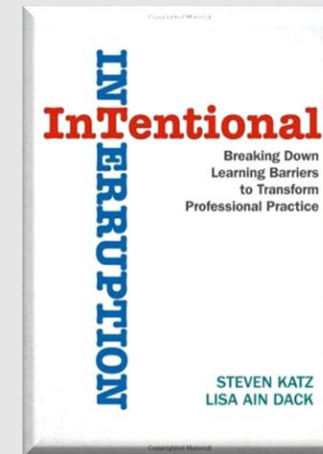
Leveraging Coherency

- Learn Teaming
- Prioritize Global Competencies – create measurable outcomes
- Create communities of learners – relationships matter
- Outreach to underserved groups- closing gaps
- Leverage digitally
- Balanced learning – both digital and in-school opportunities
- Support & sustain engaging, evidence-based pedagogies
- Develop tasks that matter

Wisdom from Katz and Dack...

Strategies for 'Intentional Interruption':

1. Using protocols
2. Making preconceptions explicit
3. Ensuring that activities and interventions are rooted in *problems of practice*
4. Recruiting contradictory evidence
5. Viewing mistakes as learning opportunities
6. Encouraging a growth mindset
7. Ensuring that problems of practice are questions that people are curious about
8. Giving people autonomy in task and time





Everything we think we need is here.

Walk, Talk, Listen, Learn

FRAMES	
T	<u>en i Tide refererer til (Task) Oppgaven</u> <u>læreren ber elevene utføre</u>
I	<u>Bokstaven I representerer Instructional</u> <u>Strategies /didaktiske</u> <u>strategier</u>
D	<u>refererer til Design av klasserommet</u> <u>som læringsarena</u>
E	<u>står for elevenes engasjement</u>

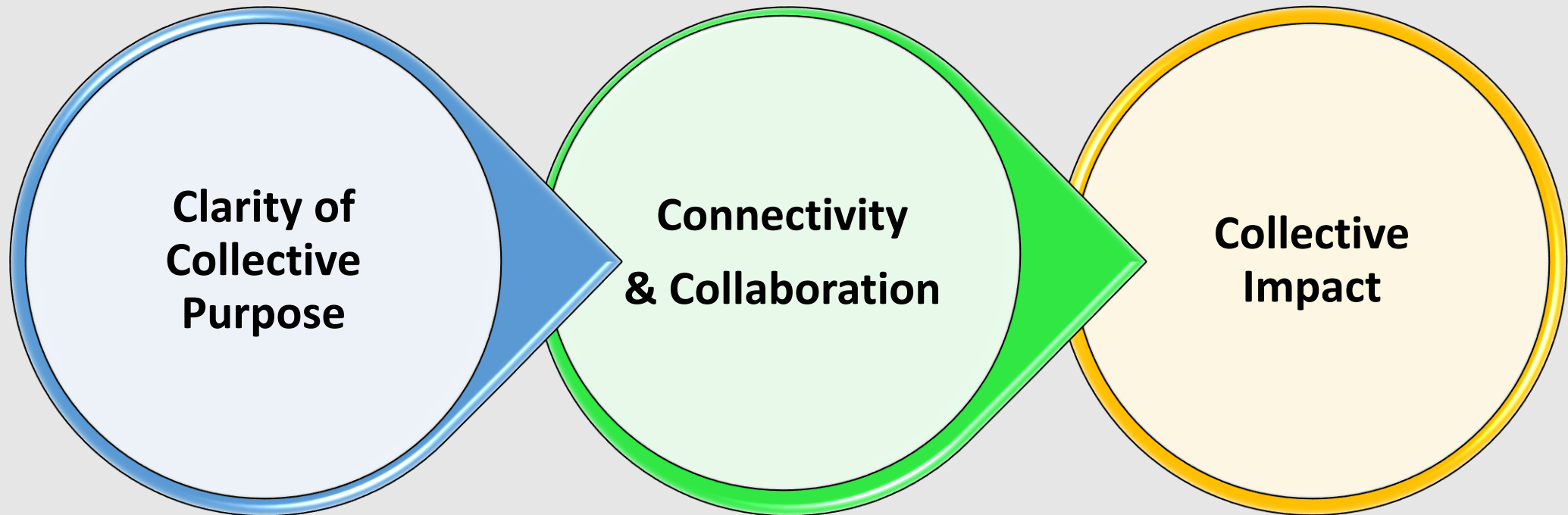
T.I.D.E.
Pedagogical
Documentation of
Pupil Learning



Key Learnings from Day 2

- Be curious together about pupil learning,
- Integrate co-planning, co-developing, sharing and growing a community of learners,
- Consider the research, strategies and approaches – select evidence-based resources that will work in your context,
- Shared our beginning plans. Remember, there likely will be blips,
- What is the plan for monitoring impact?
- What evidence of learning will you gather? How will you share and analyze evidence of pupil learning, together?
- This is a journey we are embarking on, together.

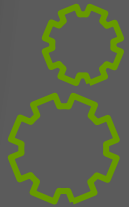
Connected Coherency



Challenge



- How do we collectively create welcoming learning spaces for pupils?
- In your school, what will emerge to be your inquiry?
- Did the sessions meet your learning needs?



Reflecting on the Collaborative Inquiry

<p>What was the Inquiry Question?</p> <p>The timelines?</p> <p>The indicators of success?</p>	<p>What strategy & approaches & resources did you use?</p>	<p>What were your data sources or evidence to assess impact?</p>
<p>How often did you meet & share?</p> <p>What worked and what needs to be tweaked next time?</p>	<p>What do the data say based on the implementation of the strategies, approaches and resources?</p>	<p>Why do you think you ended up with these results?</p> <p>What worked and what didn't work?</p> <p>What made you proud?</p>
<p>What has been your individual learning?</p> <p>What would you say is your collective learning?</p>	<p>What new strategy & approaches & resources will you now consider?</p> <p>KS: Freedman, Riehl, Tylee, Wilson</p>	<p>What will be your new Inquiry/Plan?</p> <p>How will you monitor impact?</p>

Our Contact Information

Bev Freedman

bevfreedman@iteach.ca

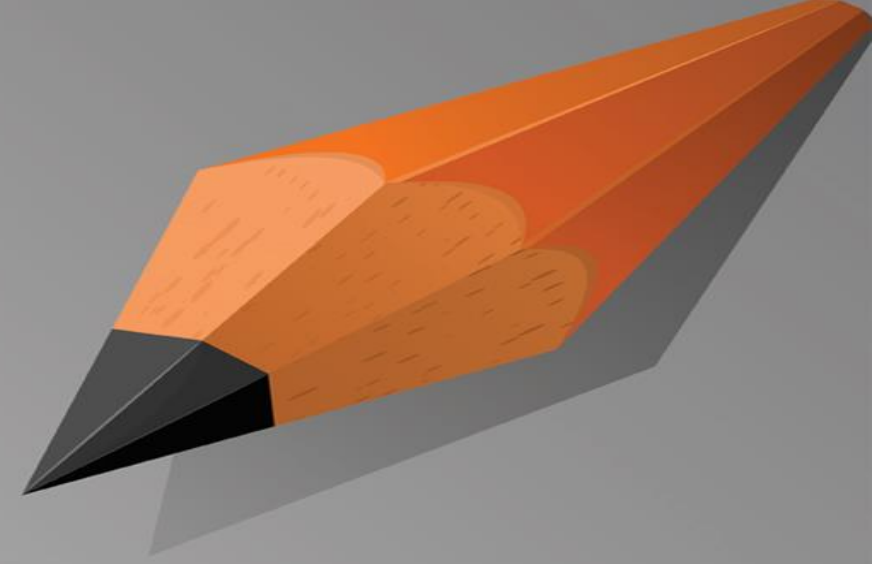
@look2leaders

Dianne Riehl

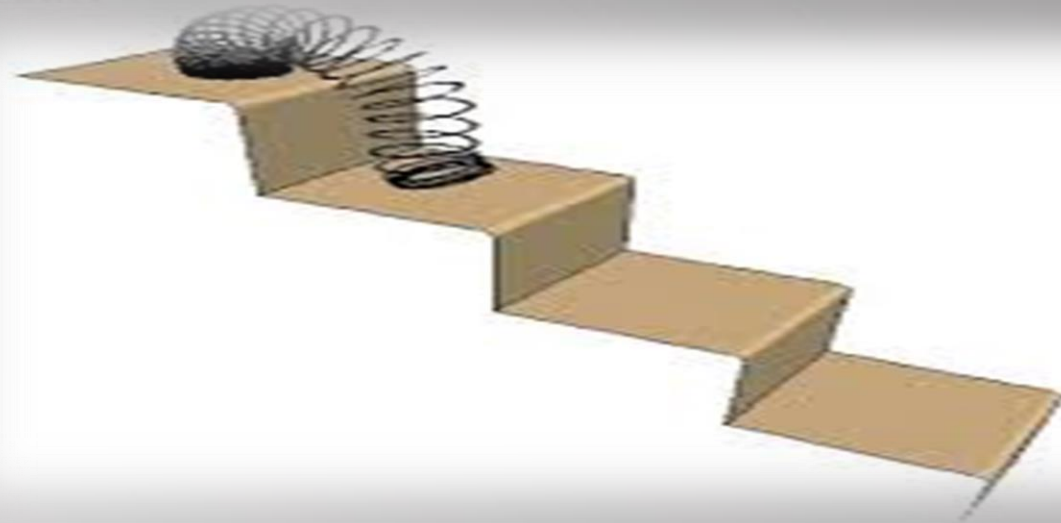
dianne.riehl@gmail.com

@dianneriehl

Tusen Takk



Questions?



Next Steps: Where Next?