

### USING DESIGN THINKING TO DEEPEN THE SPIRALS OF INQUIRY



"The main tenet of design thinking is empathy for the people you're trying to design for. Leadership is exactly the same thing — building empathy for the people that you're entrusted to help."  $\sim D\alpha vid$  Kelley, Founder of IDEO

#### Design Thinking is:

**Human Centered** 



Design Thinking begins with deep empathy and understanding the needs and motivations of people.

#### Collaborative



Design Thinking greatly benefits from the views of multiple perspectives, and others' creativity, bolstering your own.

#### Experimental



Design Thinking gives you permission to fail and to learn from your mistakes, as you continue to build on your ideas, get feedback, and then try again.

#1



## Frame Your Inquiry

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"Innovation requires a deep dive within precise boundaries around a specified purpose.

Precise boundaries significantly expand the area for innovative solutions to complex problems." David Weiss

Before you begin, it is important that you look at research about how children learn best to determine the borders within which you will be inquiring and innovating.

If we want to make more of a difference for our learners, framing our inquiry through the lens of the educational research from the OECD's Nature of Learning Document will ensure we create the conditions for deeper learning and foster a sense of agency for each learner.

0-0 LEARNERS AT THE CENTRE 0-0Recognising individual differences 0-

Students:

relevant learning

make their thinking visible

take on leadership roles

#### The Role of Educators

#### Teachers:

- build strong relationships and foster a sense of belonging
- see themselves as learners, researchers, documenters, and collaborators
- make decisions based on current educational research
- model curiosity and deep thinking
   make thinking visible
- provide opportunities for students to explore their passions and grow their competencies
   build adaptive expertise
  - Th

#### contribute to the collective knowledge of the group

The Role of Learners

contribute to creating a culture of belonging

· build their skills while actively exploring

- use their interests to guide learning
   set goals, collect evidence, and reflect on
- their progress to deepen learning
   engage in feedback cycles with peers
   see themselves as change makers

#### The Core

#### The Environment and the Use of Resources

#### Environments are designed to: enhance and personalize learning

- support learner agency
   create safety and comfort
- include different learning spaces, including nature and the community

  Pacourage:

#### Resources: • spark curiosity

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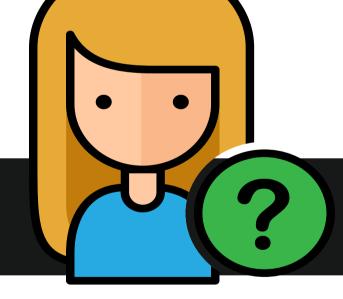
- go beyond texts and the internet to include: experts, peers, images, videos, hands on materials, thinking materials, nature, community...
- are accessible to students and students have agency to use them to explore learning

## The Design of Curriculum The curriculum is designed to:

- be personalized to meet learners where they are at and help them grow
- be connected to the interests and passions of students
   be connected to the interests and passions
   of students
- be competency driven and concept based
   build toward big ideas
- connect subjects to each other and the world
- have students explore meaningful questions through inquiry based learning
   include a wide reportoire of learning
- include a wide repertoire of learning approaches

Stretching ALL students 0-0 BUILDING HORIZONTAL CONNECTIONS 0-

Assembling a team to design with, rather than for, will encourage shared ownership of the process.



### How to Organize Your Questions

Begin appreciatively: begin with a question that people are comfortable answering about what is working well. This will build from the strengths of where people are currently at.

Be aspirational: ask a deeper question about the hopes and ambitions that they have for their learners that are connected to deeper learning and the pedagogical core.

Be experiential: ask what they are currently doing around this frame and what they think their next steps might be.

**Probe further**: explore any interesting themes or ideas that you picked up on during the conversation in more depth. You usually get the most information from follow up questions you ask to get at the heart of what they are saying.

# Determine Your 4 Questions

Start by determining what questions you would like to ask students, educators, and parents.

These questions should be connected to the pedagogical core in order to make the most difference for student learning at your school.

The questions should have a positive focus and will funnel from broad, overarching questions to more specific ones.

## Ask a Sample of Students, Educators & Parents

**Empathy Interviews**: to truly empathize, it is important to ask your questions in person. This can be done one-on-one or with small groups of people.

The key is to listen to the music behind the words to truly understand the song they are singing.

Keep in mind: during the actual conversation, let the person you are speaking with lead you to what matters to them. As you encourage them to tell their stories, listen and record what they are saying and doing.



At this stage in the process you and your team will make meaning of the data by reviewing what each person or group was saying and doing. You will use this information to make plausible inferences about what they are feeling and thinking.

## Scanning: Conducting Empathy Interviews

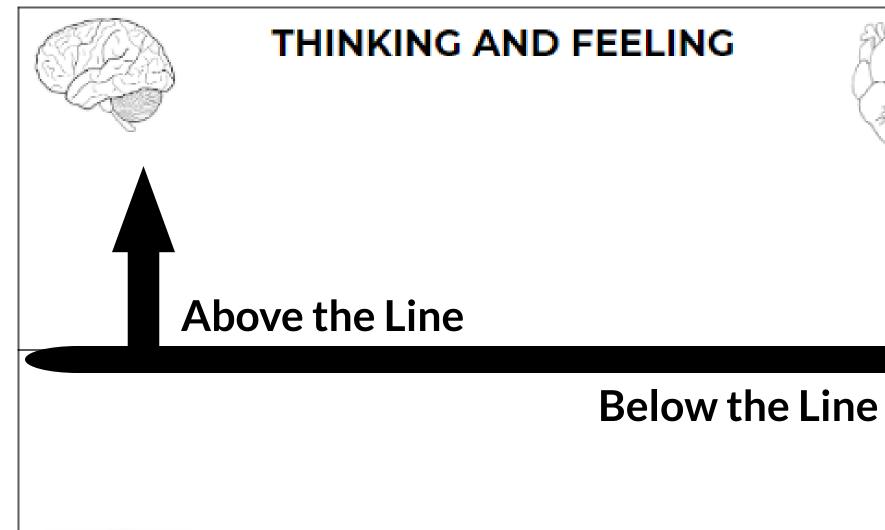
Empathy is crucial to a humancentered design process. When you listen for understanding, you can set aside your own assumptions about the world in order to gain insight into what people are thinking and feeling.

In order to design for your users, you must build empathy for who they are and what is important to them. Watching what people do and how they interact with their environment gives you clues about what they think and feel.

Infer What is Above the Line

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Empathy Map



**SAYING AND DOING** 

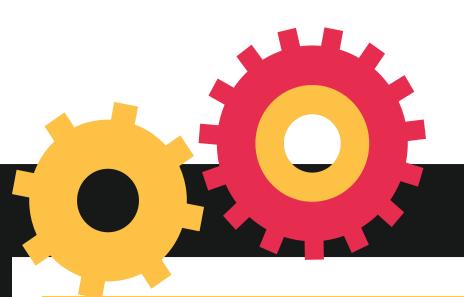
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## Focusing: Finding Key Patterns

With your team, look at everything that the students, educators, and parents are thinking and feeling. Find patterns in the data.

These patterns should capture the essence of what they were thinking and feeling and allow you to find a focus that is conncected to your inquiry frame.

It might be helpful to find direct quotes from what people said as evidence for your patterns.

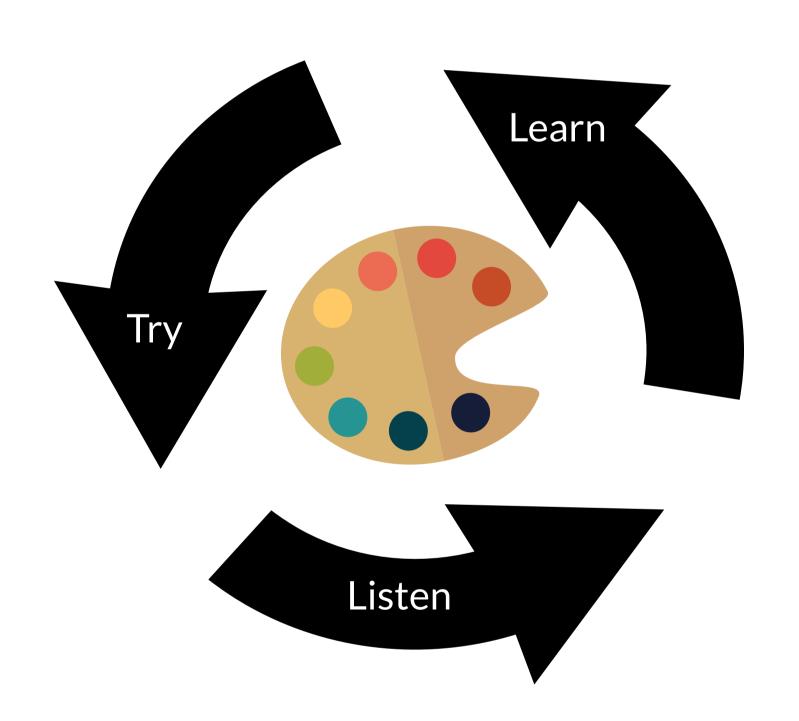


## Hunching

At this stage, you will use the patterns you discovered (focus areas) to make hunches about what is truly happening for our students within four elements of the pedagogical core.

Prior to moving forward with new learning and taking action, it is important to first check your hunches by using pedagogical documentation.

Using pedagogical documentation to look at learning in the classroom together is an important part of the collaborative inquiry process between groups of educators. To truly plan from the voices of your students, you must also use pedagogical documentation on an ongoing process as a part of your daily planning.





## Learning

Were your hunches accurate?
What adjustments might you
make now that you better
understand the complex story of
learning in your learning
environments?

What learning will your inquiry team of educators engage in that will help you to deepen learning for each of your students? How is this area of learning connected to the pedagogical core?

If we... then...



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#### Pedagogical Documentation

When you document, as a part of checking your hunches, you will curate valuable information that will guide next steps in your learning and your students' learning.

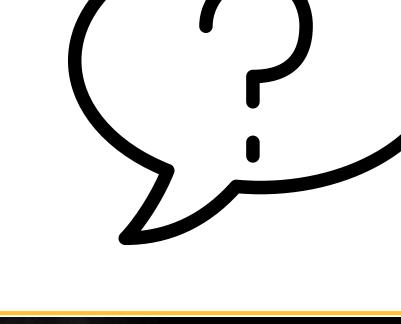
When students' words, thoughts, and questions are made visible, and are used to build the collective knowledge of the group, they feel heard, valued, and in charge of their own learning.

Documentation allows you to understand the holistic and complex story of learning, and when educators use pedagogical documentation as an ongoing part of the instructional process, it amplifies the learning of both teachers and students.

To learn more: see the visual created by the Central Okanagan Public School District's Instructional Leadership Team <a href="http://bit.ly/PedagogicalDocume-ntationILT">http://bit.ly/PedagogicalDocume-ntationILT</a>



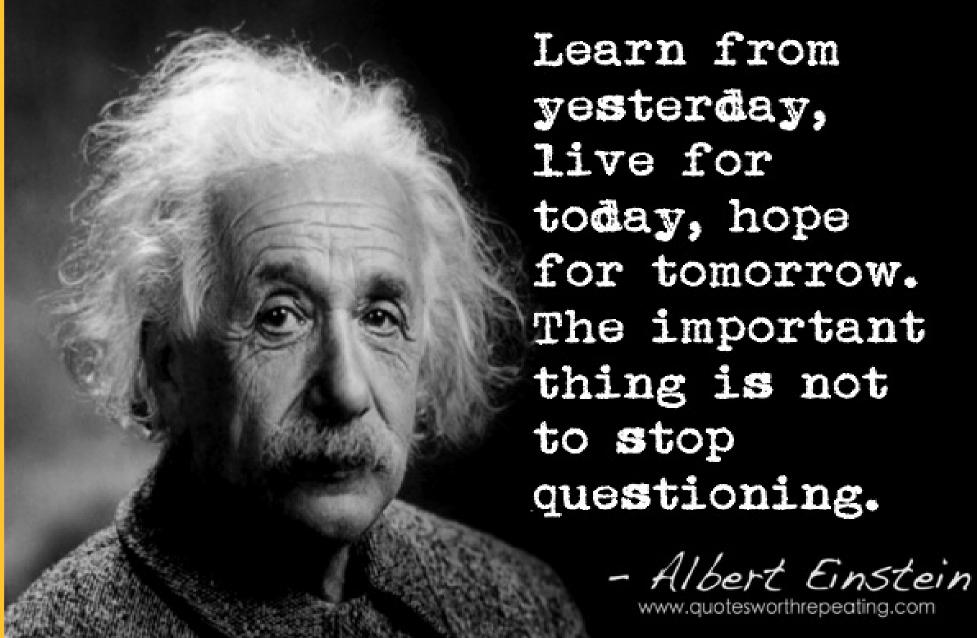






With your learning team, how will you build collective knowledge together as you test your hunches to transform learning for students?

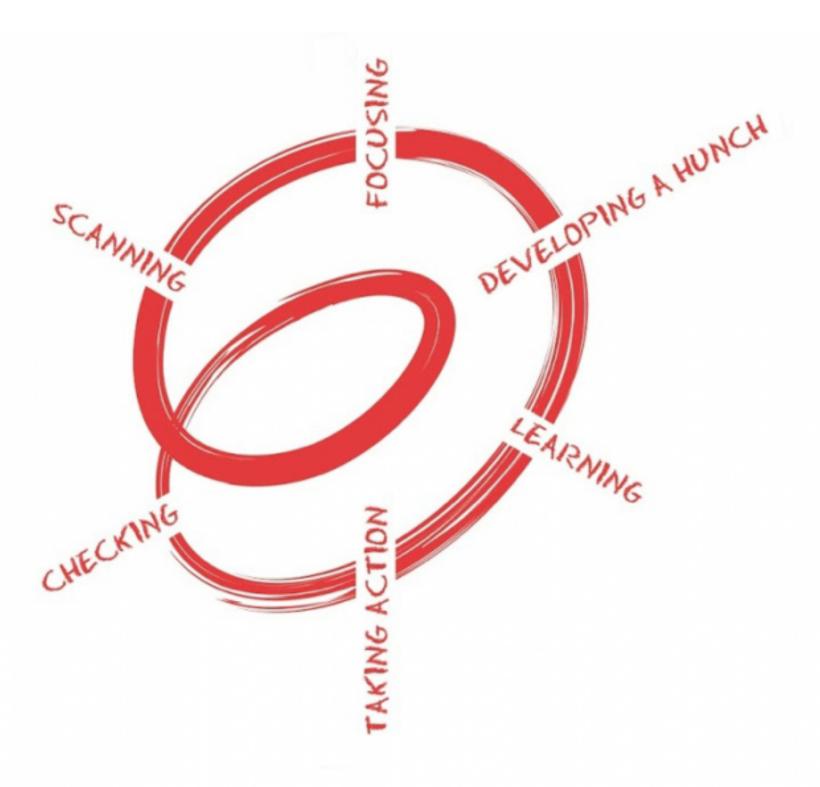
How will you bring an inquiring mindset to your action research as you embed your new learning within day-to-day practice and rigorously reflect on it in collaboration with others?



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## This should not be separate from the learning

Cyclical Learning: By listening to our students' voices, we can allow their questions, thoughts, and interests guide the learning. We will know what we need to continue to learn in order to keep our students at the center of their learning.



## Checking: Teacher as Researcher

Are we making enough of a difference? How will we know?

In order to check that what we are doing is making a real difference for students, we will need to consistently check through the use of pedagogical documentation and by asking students these questions during the learning process:

- 1 What are you learning and why is it important?
  - 2 How are you doing with your learning?
  - 3 What are your next steps in learning?

"In order to transform learning, the most important cultural shift that must occur is the creation of cultures in schools where both adults and children are seen as learners who have deep agency and ownership over the learning that they do."

~Richardson and Dixon