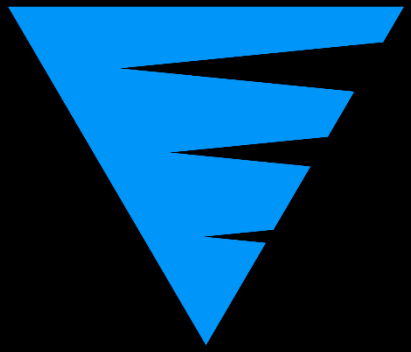
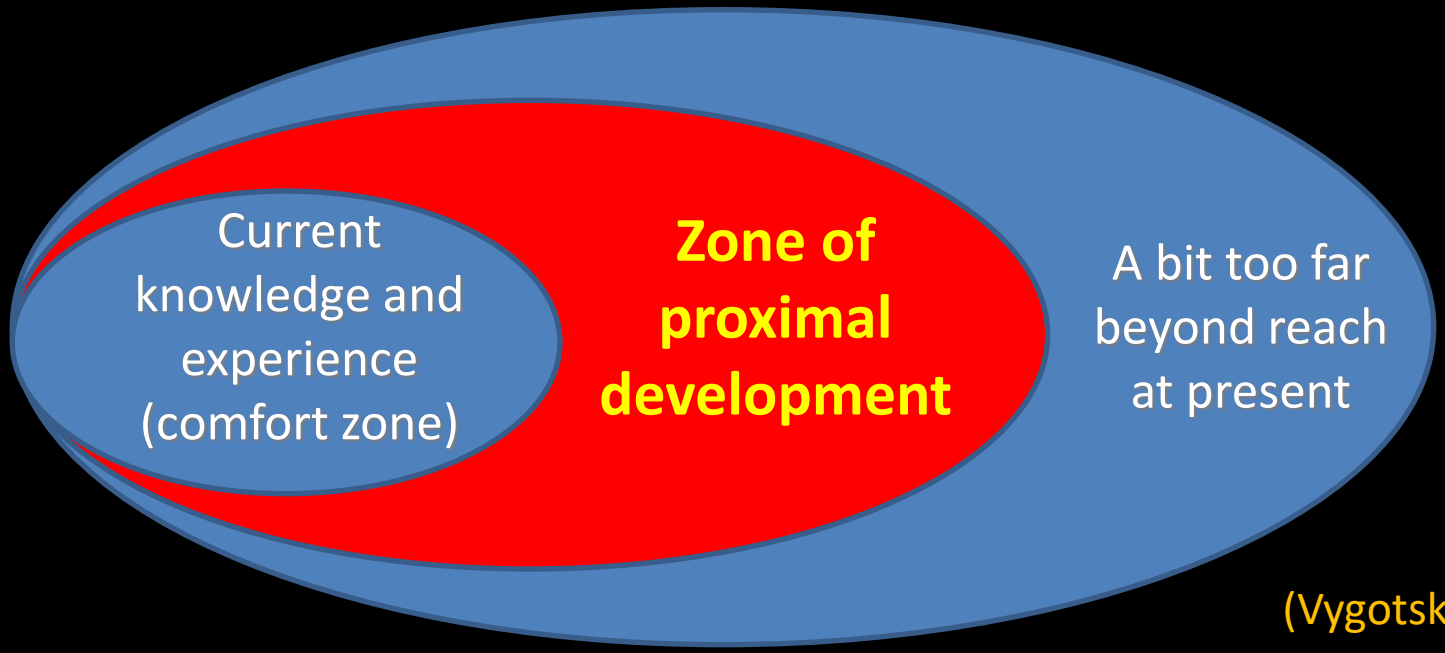


Pacific School of Innovation and Inquiry

UVic EDCI 336

- Jeff Hopkins –
Founder and Co-Principal

Why would you quit the system and create a new school?



Zone of proximal development

- Different for each learner
- Depends on timing/readiness
- Demand a variety of learning environments and methods

What cognitive neuroscience and educational research is telling us…

- Contextualized Learning
- Harnessing the power of being with other learners
- The integration of emotion and cognition
- Self-regulation
- Learner agency
- People often get stuck, but they can change
- Authentic assessment practices have been shown to be the single biggest factor in improving learning outcomes

Considering quality of knowledge
Knowledge, not just quantity

- depth
- knowing vs. knowing about
- internalizing and testing concepts
- beyond curriculum “coverage”

The PSII Approach to Learning and Teaching

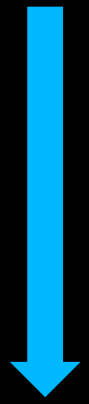
The shape of the learning path at the Pacific School of Innovation and Inquiry (PSII) is the key tenet and the reason for this school. It is a combination of

Emergent/personal curriculum (This is the idea that what needs/wants to be learned emerges through the teaching and learning relationship and is informed by earlier learning that leads to it. So, what emerges for each learner is unique to each learner.)

Common curriculum (There are also some learning goals that are universal, but which can still be addressed through the individual lens created by and for each learner.)

PSII Inquiry process

Assessment
(of, for, as learning)



1. Question generation
2. Initial research
3. New Questions (reframed, deeper, more)
4. Develop Learning Activities
5. Execute Learning Activities

Step 1: Questions

Values Questions
(What's right? What do I believe? What's important?)

Cause and Effect Questions
(Where will this lead? What if…?

Theoretical Questions
(How did we end up here? How did this evolve?)

System Questions
(How does this work? What are the connections/relationships? How well does it work?)

Descriptive Questions
(What is this? Who is that? What happened?)

Types of Questions: Inquiry Springboards

Values Questions

(What's right? What do I believe? What's important?)

eg) Should people give money to people begging on the street?

eg) Do the needs of the many always outweigh the needs of the few?

Cause & Effect Questions

(Where will this lead? What if?)

eg) If the earth had two moons opposite one another, would we no longer have tides?

eg) Do different colours affect people psychologically? If so, how? How could this be used practically?

eg) Will global climate change create the conditions for more human conflict?

Theoretical Questions

(How did we get here?)

eg) How did we end up with the legal system like the one we have?

eg) Why does the world exist?

eg) How did the whole world end up using the same form of music notation?

System Questions

(How does this work? How well does it do what is intended?)

eg) Is there a real system for winning poker, or is it just luck? Is it about math or psychology?

eg) How is the internet structured? Is it the same now as it was when it started? Is it sustainable?

eg) Do different musical scales allow for more or less creativity in composition or performance?

Descriptive Questions

(What happened? What is this?)

eg) Why are people talking about oil pipelines so much? Where does the pipeline go? What's bitumen?

eg) When did World War One start? Who was in it? How did it end? Is it related to World War Two?

eg) What were the events that led up to Canada's confederation?

How does nature shape and influence who I am?

Why are some people criminals? Violent criminals?

How do I create a functional e-commerce business and website?

How does a quantum computer work? Is it related to quantum superposition?

How does your weight affect how fast you can ski downhill?

Can I improve my poetry and observational skills by writing a poem every day?

Understanding French slang in music.

How can I synthesize ADHD medication in the lab?

Is it possible to recreate ancient food dishes accurately with modern ingredients?

How can I better use AI to plan and track my workouts?

What can I learn from peoples favourite stories and how can I use that information in my own writing?

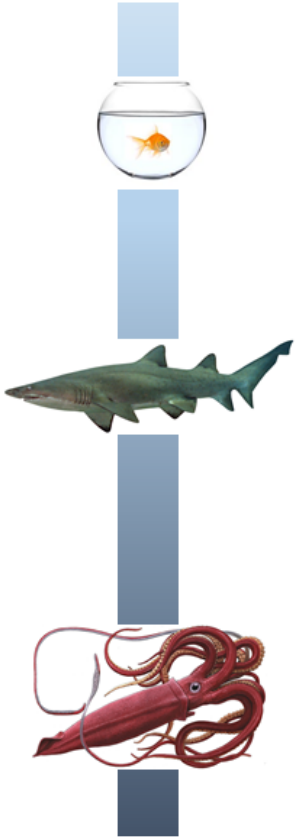
internet		experimentation		discussion
book/periodical		trial-and-error		Q & A
interview		observation		expert/mentor
survey		art-based exploration		teacher-led session
public records/archives		debate		learner-led session
action and reflection				

Example: "After completing my work in step 2, I now know more about this topic.

My new questions are:

- Is lucid dreaming possible and can it help people address real issues?
- What are the various contemporary schools of thought on the meaning of dreams?
- How have dreams been portrayed in literature?
- Do different cultures in the worlds place different levels of importance on dreams?
- Are dreams part of the regenerative process of sleep?
- What are the characteristics of the various sleep stages (REM, alpha, delta…)?
- Is it easier to wake up in the morning if you are at the end of a sleep cycle?
- What is the relationship between diseases and disorders and sleep deprivation?
- Do artists often refer to their own dreams for inspiration?
- What is the difference between nightmares and night terrors?
- On average, how much sleep do people really get each night?
- Does a darker bedroom make it easier to dream?
- What equipment/techniques are used to measure levels of consciousness?
- Is hypnosis at all related to sleep and dreaming?
- Is it dangerous to wake a sleep walker?

Learning Verbs and Approximate Depth



Verbs that describe learning activities at each level of depth	Level Name
Arrange, define, describe, identify, label, recognize, recall, reproduce, select, repeat, duplicate, list, order, name, match, …	Knowledge
Explain, convert, summarize, paraphrase, illustrate, classify, estimate, distinguish, express, give examples, infer, locate, select, rewrite, review, translate, discuss, …	Comprehension
Use, compute, solve, demonstrate, apply, construct, change, dramatize, illustrate, interpret, manipulate, modify, predict, produce, relate, show, sketch, write, analyze, categorize, compare, contrast, ….	Application/Analysis
Create, design, hypothesize (what if), invent, develop, arrange, assemble, collect and categorize, combine, compose, construct, devise, formulate, reconstruct, revise, rewrite, set up, synthesize, redevelop, …..	Synthesis
Judge, recommend, critique, justify, appraise, argue, conclude, defend, discriminate, evaluate, interpret, predict, value, rate, ….	Evaluation

Example: 'Based on my new questions, here is how I would like to pursue the learning within this line of inquiry:"

- Conduct secondary research on dream and sleep science, including lucid dreaming, sleep stages, the role of sleep in health, nightmares, night terrors, and sleepwalking (1 week timeline)

- Write a story about a lucid dreamer who harnesses the power of the surreal dreamworld to develop cures for major illnesses in the real world (2 to 3 weeks, including editing and writing workshops)

- Ask for teacher-led writing workshops on character development and suspense creation. (2 to 3 lessons; invite other students who are writing things)

- Ask teacher for a list of literature titles in which dreaming plays a major part. Read some of those (1 week), and synthesize the main themes in a short essay. (1 week)

- Conduct some primary research on the relationship between darkness of room and dreaming. (ask for student volunteers to participate for one week in either a dark room or a brighter room and to report on dream (remembered) frequency and analyse results (one month).

- Ask teacher for a lesson/discussion on research methodology so my study (above) is as good as it can be (1 hour)

- Research famous artists who have credited their dreams as sources of inspiration for their work. Interview some local artists and ask them about the influence of dreams on their work. (1 week) These interviews could be recorded on the zoom recorder (with artists' permission) and made into a podcast. (3 to 4 hours)

(These examples touch on learning outcomes in all competency areas, plus major outcomes in English, Science, Psychology, Math, Art, Social Studies, Drama, Digital Media,…)

We use tools….

- Trello
- Portfolio
- PSII assessment framework (on our website)
- gannt charts
- business plans/business model canvases
- Our own software! – Comtinuum

The role of the teacher...

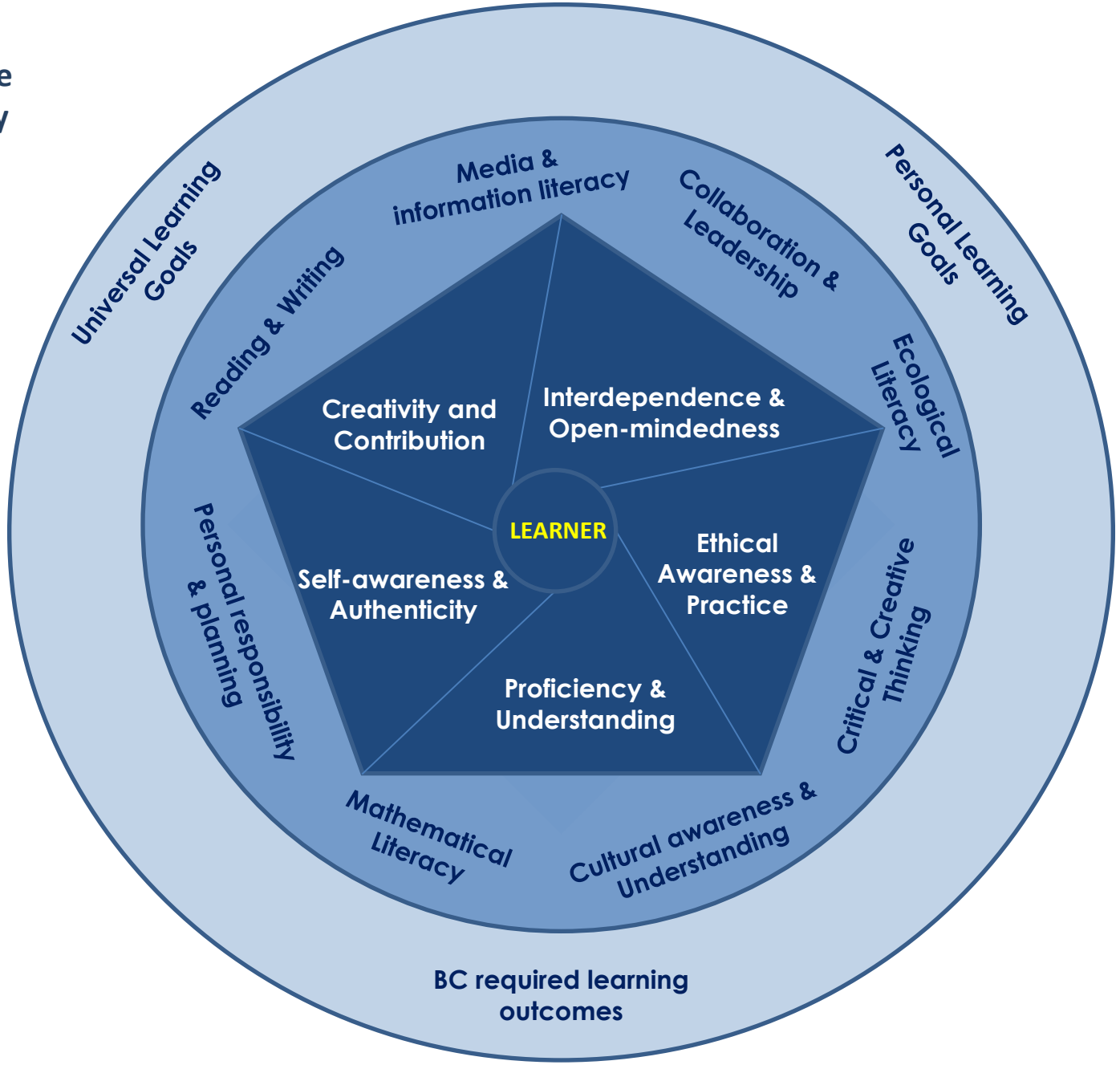
mainstream schools:

Sole planner, creator, deliverer, assessor, motivator, monitor, expert, evaluator, reporter and follower of the curriculum for a group of students.

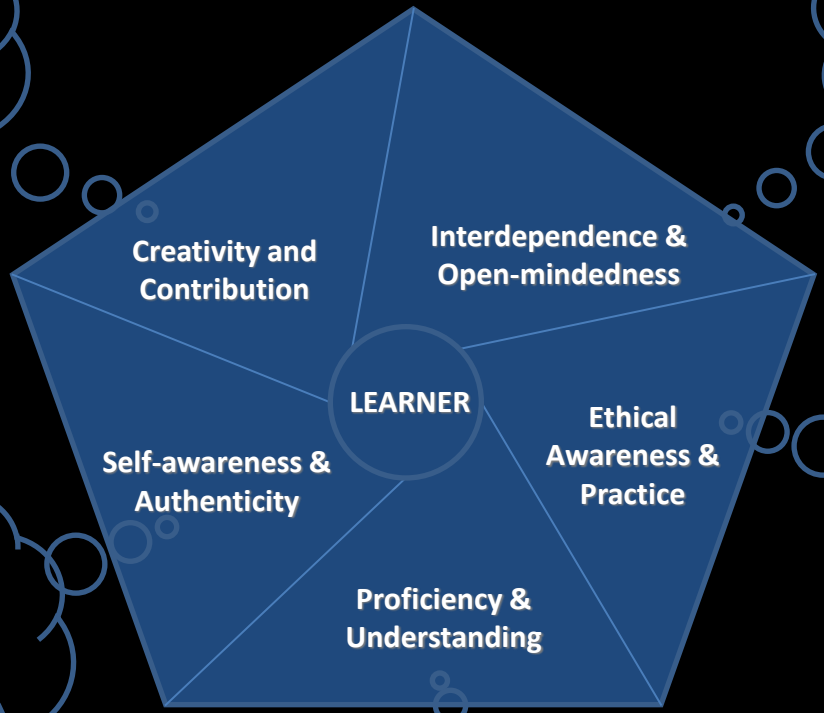
Pacific School of Innovation and Inquiry:

Professional facilitator of learning, who adapts learning conditions to be developmentally appropriate to each learner, who encourages and seamlessly incorporates legitimate in- and out-of-school learning experiences, and who offers or finds expertise as demanded by co-created individual learning plans.

It all starts with the learner. That's why "learner" is in the centre.



Valued Human Attributes



What do I contribute to my community? What do I add to the world?

What is the nature of my connection to others?

How does my sense of what is right guide my actions and shape my knowledge?

How well do I know myself? Who am I when alone? When with others?

What do I really know? What can I really do?

Next come competencies. While important and while a better starting point than subjects, competencies still must be nested in the deeper valued attributes.