



**PROFESSORS WITHOUT
BORDERS**

**Philosophy
Toolkit**



Studied at four art schools
 School teacher
 Founded a University Dept.
 External Examiner at Three Unis
 Visiting Professor at Salford University
 Co-founder and Principal of SCA
 Senior Fellow
 Taught every age group from 8 year olds to
 2nd Supervisor on PhD's



ASK WHY?

NOT WHAT?

CHALLENGE

QUESTION

LISTEN

HEAR

**You are here to give
students the ability
to learn, test and
verify**

YOU ARE HERE TO GET
STUDENTS INTO THEIR
FLOW OR INTO “**THE**
ZONE”

**EDUCATION IS THE
DEFINITION OF SELF-
EMPOWERMENT**

**BE A PUNK TEACHER,
BREAK THE RULES**

BREAKDOWN **PRECONCEPTIONS**

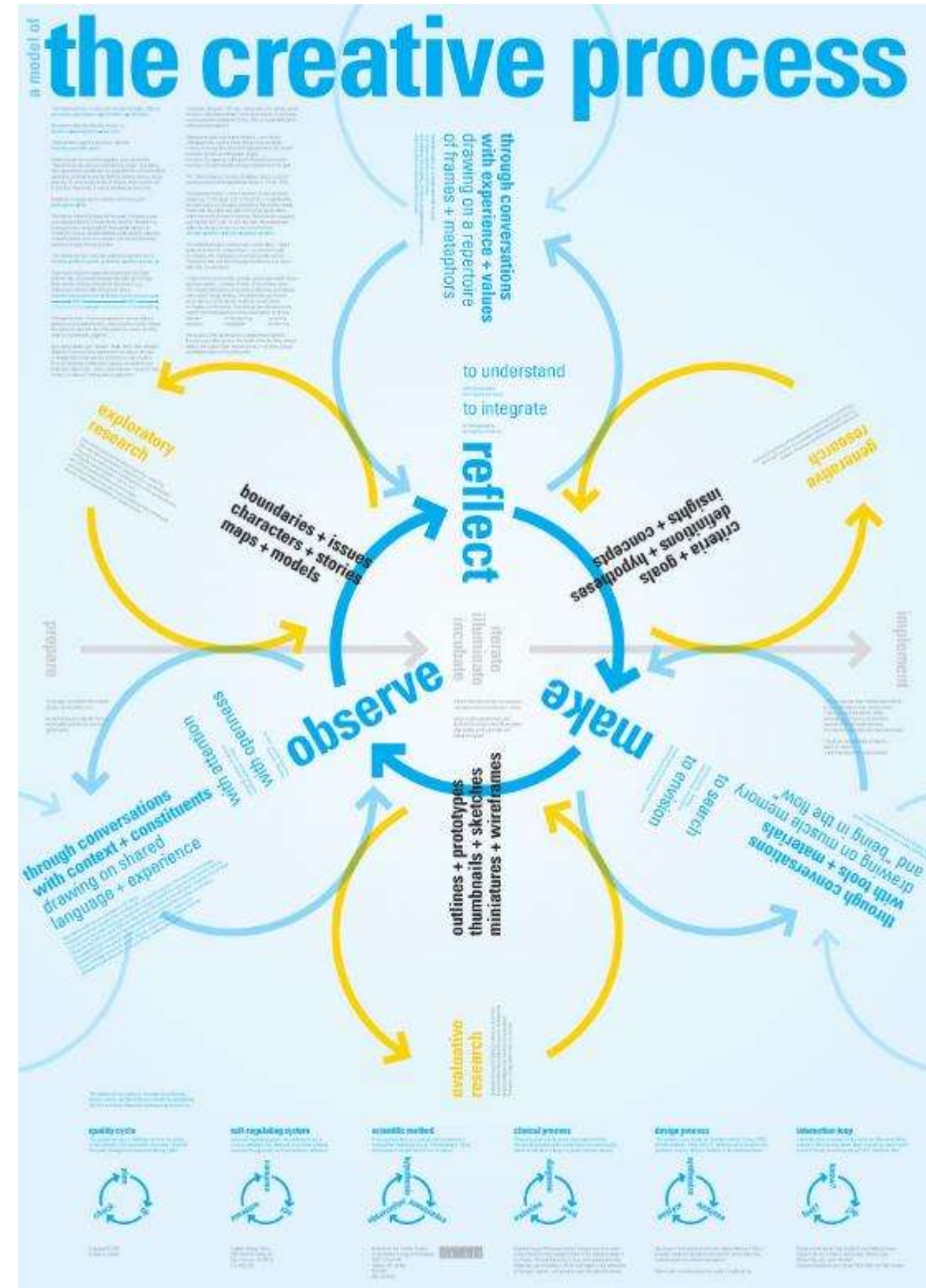
- 1. Preconceptions** are anchors that keep students stuck where they are.
- Your job is to **up** those anchors.
- 3. Nothing can be assumed**, check, test and look at things in different ways.

CREATIVITY

Creativity
+
Knowledge
+
Technology
=
21st century

Creativity is supported by and is part of the everyday world and our lives. Each day we solve problems but often we don't recognise this as **creativity**.

Encourage any positive decision no matter how small



**THE CREATIVE PROCESS AND
THE SCIENTIFIC METHOD ARE
TWO SIDES OF THE SAME
COIN**

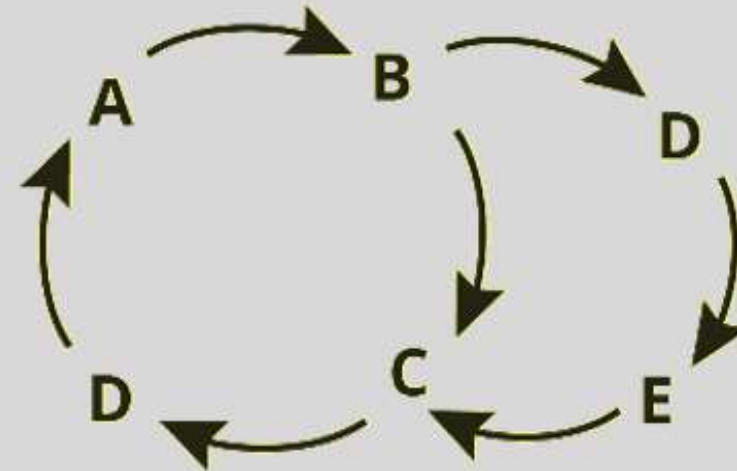
PICASSO FAMOUSLY SAID
THAT HE SPENT **40 YEARS**
TRYING TO LEARN TO
DRAW LIKE A CHILD

THINK SYSTEMS NOT LINEAR

Teach so that every major point is
an emergent node

Systems Thinking

Thinks in loop structure



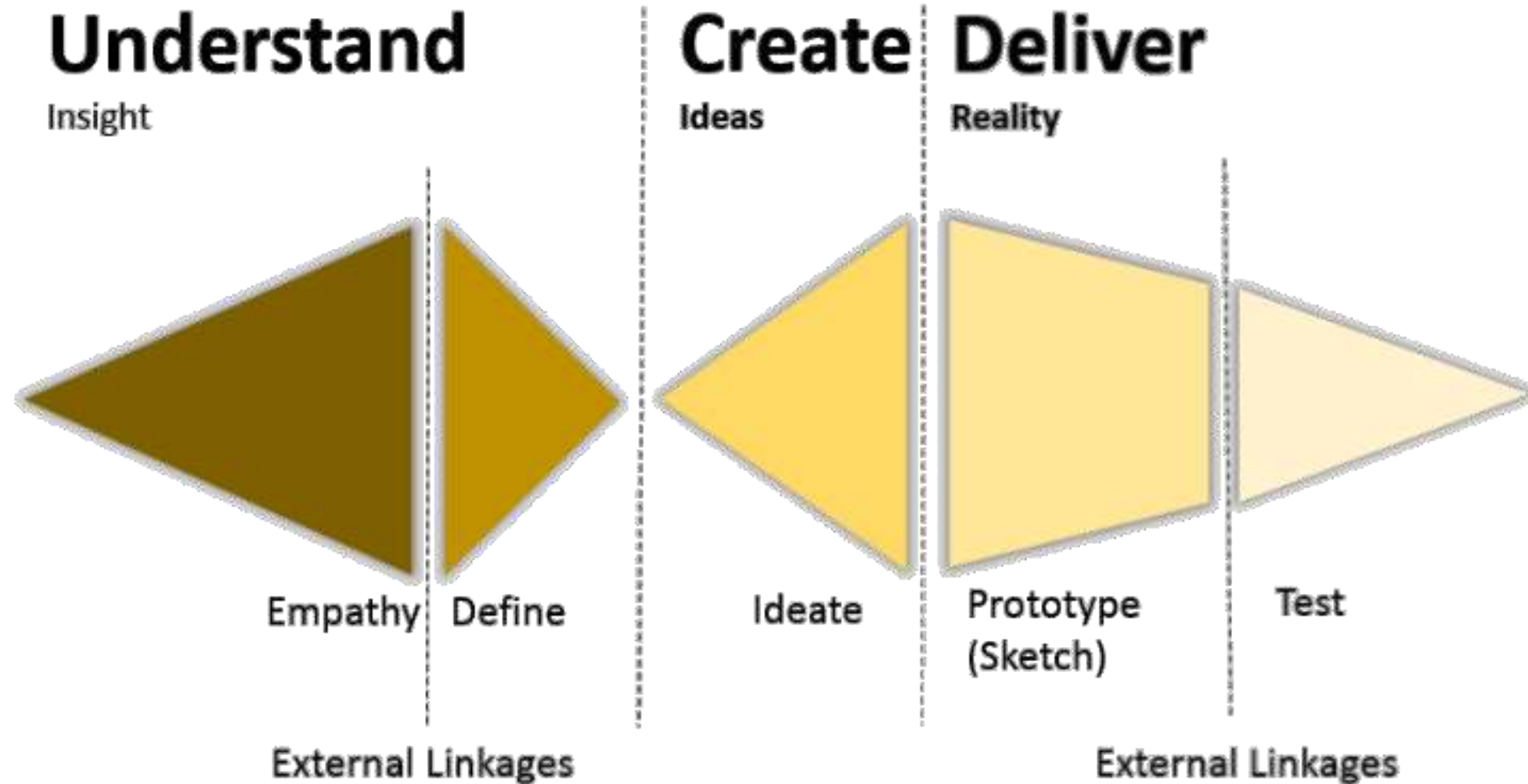
In systems thinking a system's behavior emerges from the structure of its feedback loops. **Root causes** are not individual nodes. They are the forces emerging from particular feedback loops.

Creativity often exists in the connections between things.

Society and business are full of complex adaptive systems.

Emergence and emergent properties are a key feature of a Complex Adaptive system (CAS). The emergences are where new solutions arise. Look at the links between things and see what emerges.

Encourage Systems Thinking



Understand that creativity is a process either externally guided or self guided. **Creativity** = making mistakes and learning from them. **Creativity** is not a linear process, each phase can repeat

Understanding context, or empathy, is central to our philosophy

Good school teachers don't assume that everyone remembers what was taught in the previous session, they include it in the next session but in a way that moves the story forwards.



EXTRA DETAILS



THINK OF **LEARNING** IN THESE TERMS



Space



Scale



Connectivity



Reflection



Enrichment



Embodiment



Personalisation

CONTROL THE **LEARNING SPACE**

Make the space collaborative, take charge of the space



- Stand up, sit down, move, invite others round you as you teach
- Chalk and talk should be at a bare minimum
- Good portion of perimeter walls made up of writing/presenting surfaces
- Movable furniture
- No one fixed teaching position
- Learners able to physically work in groups easily
- Everyone can hear clearly
- Mixed groups
- Teacher as facilitator
- Exercises not essays

CONTROL THE **LEARNING SPACE** (2)



Discussing things in an interactive way



Holding a Scrum, talking in turns about what they have done

SCALE

COMMUNITIES CROWD LEARNING



1. Encourage learners to use any network they have, either online or physical
2. Get them to discuss the problem with their networks
3. Use their networks for hints at solutions
4. Start problem solving in class then take what they have done and work with others outside the classroom

CONNECTIVITY

NETWORKS



1. If they have them, encourage use of own devices so that learning can be seamless as possible
2. Encourage them to take online free courses
3. Share online
4. Comment online
5. Ask for help from experts
6. Crowdfund a problem or solution

REFLECTION I

ASK WHY?

PEER VALIDATION

1. What should our students achieve?
2. Where are they in relation to the course goals and priorities?
3. What do they need to learn next?
4. What learning happened for the students?
5. What will they do next to ensure that they continue to achieve? (learning inquiry)
6. Encourage reading
7. Encourage discussion
8. Encourage personal reflection
9. Encourage testing
10. Provide feedback, verbal, peer, online crowd or written
11. Test and create reports
12. They should present their ongoing work to the group for discussion – on the wall or daily scrum
13. Sharing a problem of practice – ad hoc group discussions
14. They should ask “Why?” of every decision or deconstruction point

REFLECTION II

ASK WHY?

***YOU* SHOULD**

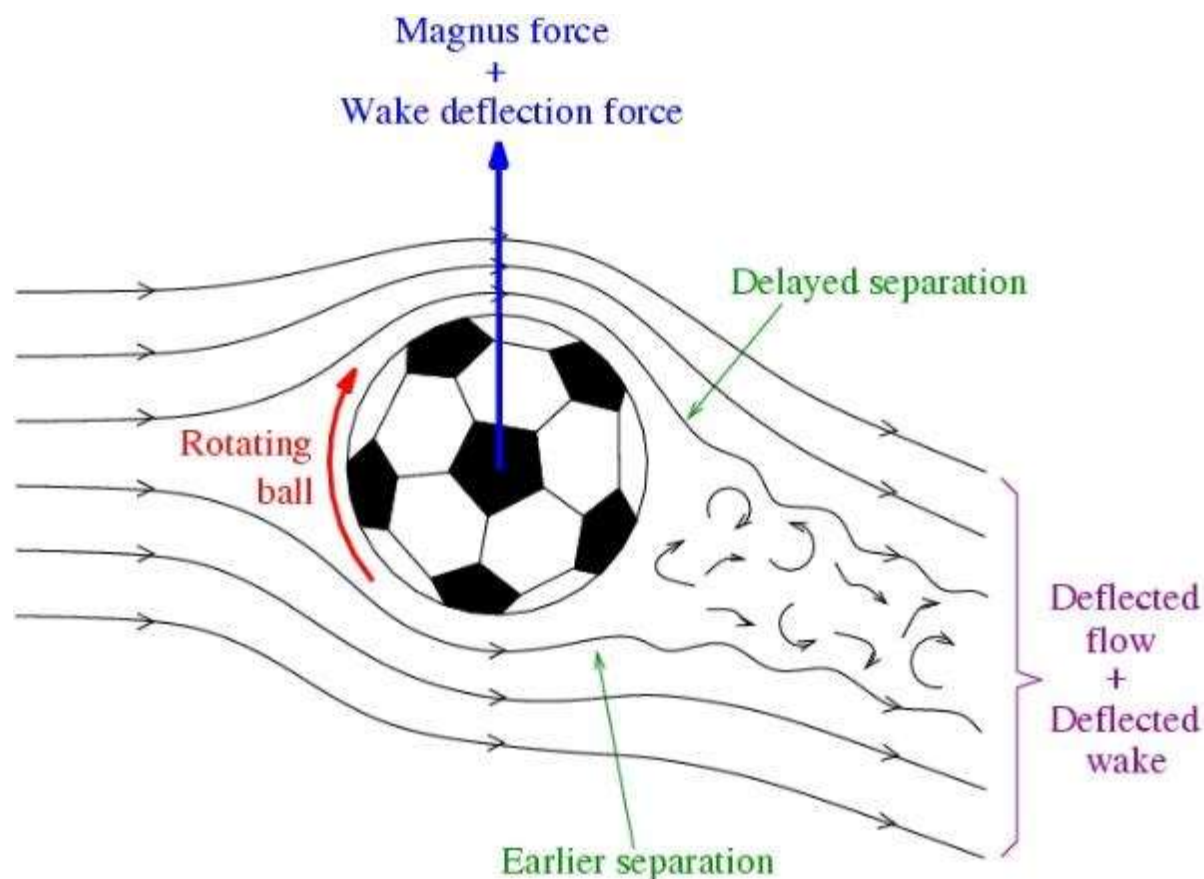
REFLECT TOO!

Answer these questions in your blog
and share it

1. Was the lesson too easy or too difficult for the students?
2. Did the students understand what was being taught?
3. What problems arose?
4. What did our students achieve?
5. How did they do in relation to the course goals and priorities?
6. What do they need to learn next?
7. What learning happened for the students?
8. What will they do next to ensure that they continue to achieve? (learning inquiry)
9. What reading did I suggest and why?
10. Did they discuss and how did that work?
11. What form did personal reflection take?
12. Did I provide feedback, how was it given? Verbal, peer, online crowd or written. How was it received?
13. What came out of the scrums?
14. Did the students assess you?
15. How did I deal with any problems that came up during instruction?
16. Was I perceptive and sensitive to each of my students' needs?

ENRICHMENT

**STORYTELLING,
GAMING AS LEARNING,
COMPUTATIONAL THINKING,
INCIDENTAL LEARNING**



1. Tell stories related to the problem or learning
2. Ask for stories - put their problems into story form
3. Turn problems into games and strategy
4. Debugging problems, step by step looking at loops in the learning
5. Breaking down problems into component parts and linkages i.e. a system
6. Events can be a useful learning tool – get them to create an event where they share their learning
7. Integrate what they are doing with the real world; make the problems real world problems
8. What is happening in their real lives that can be used to help solve problems or reflect on things?

EMBODIMENT

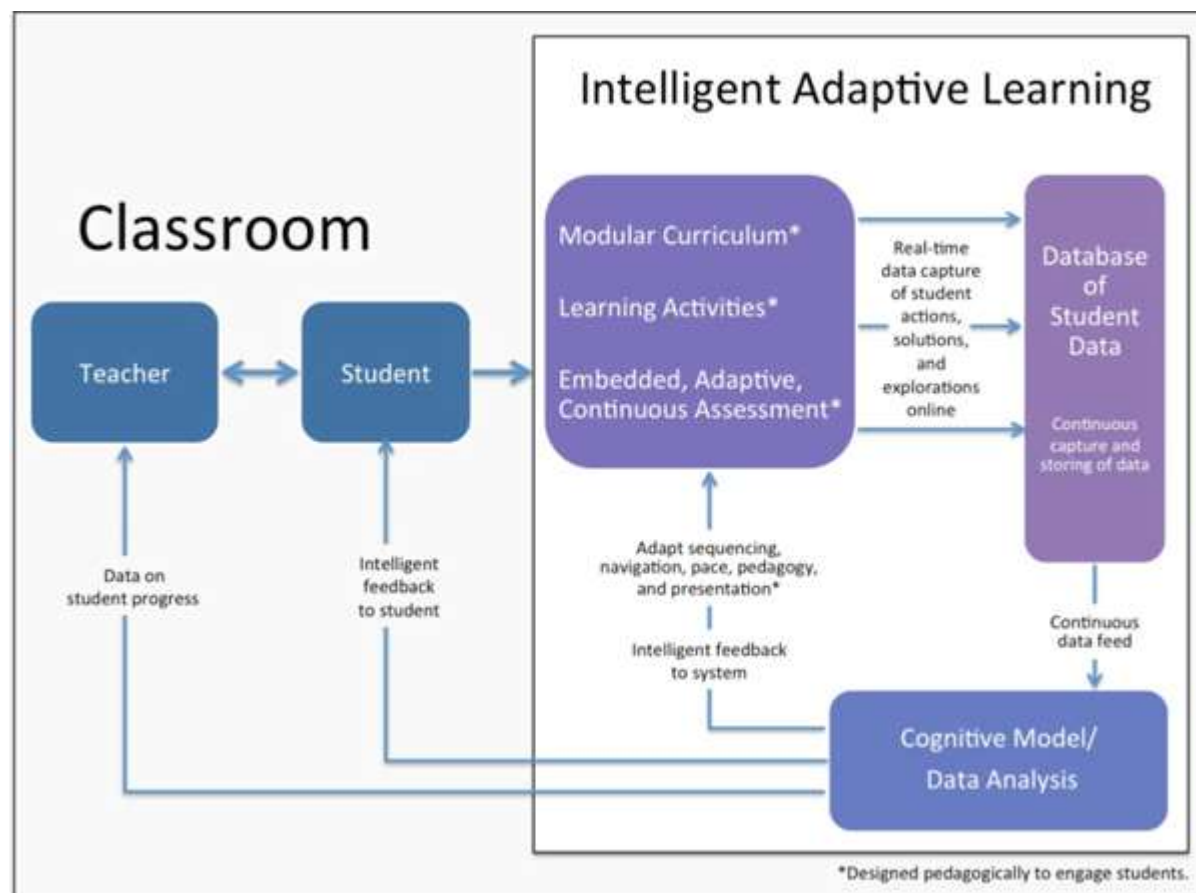
MAKER CULTURE, HOW DO THINGS IMPACT ON THE PHYSICAL SELF?



1. Consider what they are learning in relation to their body. The body has sensors and intelligence, use them.
2. Tools, what tools should they use?
3. If they have access
 1. Computers
 2. 3D printers
 3. Raspberry Pi
4. Local materials
5. Ready made and to hand materials

PERSONALISATION

**ADAPTIVE TEACHING,
PERFORMANCE DATA,
EMOTIONAL DATA,
STUDENT CENTRED**



1. Being clear about how you will promote, measure, and celebrate understanding
2. Helping students understand what's worth understanding
3. Diversifying what you accept as evidence of understanding
4. Creating curriculum and instruction around a need to know
5. Collaborating with students to create the rubric or scoring guide
6. Letting students choose the project's purpose
7. Letting students choose their own media form that reflects the purpose of the reading
8. Think **feedback**

BASICS

THINGS TO DO EVERY DAY



1. Town Hall everyday – create a focal point - Interactive session not didactic
2. Discuss the day ahead and encourage interaction
3. Progress boards for all students – each days achievements listed
4. Set goals with each student for each day – scrum model
5. Group working each day, even if its just for reflection
6. Give students chance to be on their own each day
7. Get them to tell you about other things they are interested in in the wider world. Everything is connected.

BASICS

THINGS TO DO EVERY DAY

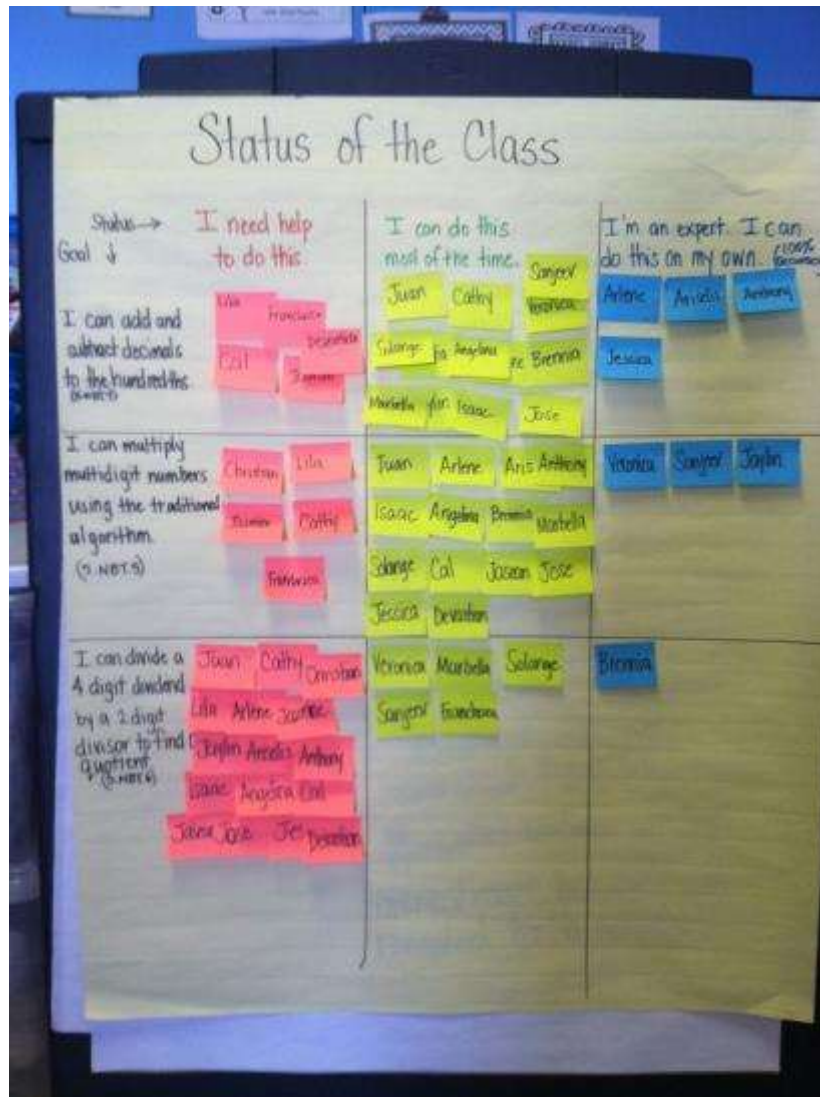


Teaching sessions - Interactive sessions not didactic

1. Your sessions ought to be interactive.
2. Demonstrate when you can.
3. Get students to demonstrate their understanding.
4. If you must be didactic then try to encapsulate what you are teaching in a story.
5. Stories frame a problem in a way students can understand
6. Ask them to reframe problems in stories from their perspective.

BASICS

THINGS TO DO EVERY DAY



Progress boards for all students

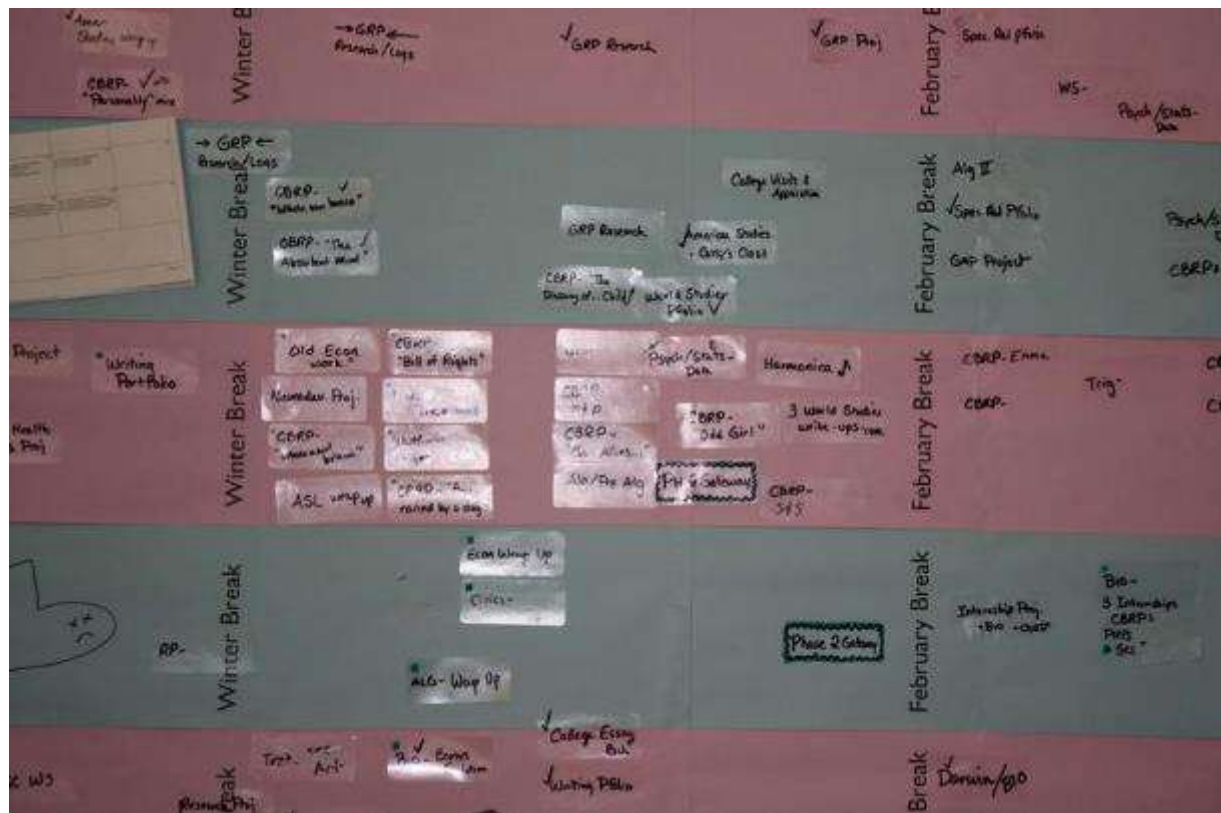
1. Keep a visual record of progress so everyone can see
2. This can be post it notes, chalk based or even stones on the ground.
3. It is important to show that students all move on each day
4. It can be serious or fun



BASICS

THINGS TO DO EVERY DAY

Set goals with each student for each day



As an output of the scrum they can set goals for the day or at the end of the day they can do another stand-up where they express one, two or three goals for the next day

BASICS

THINGS TO DO EVERY DAY

1. Group working each day, even if its just for reflection.
2. Learning is never best in isolation. Make points where they discuss each others works or come together to solve a problem
3. Outputs should contain something by each student as some tend to be quiet

BASICS

THINGS TO DO EVERY DAY

1. Give students chance to be on their own each day
2. Structured self reflection, even just 30 minutes, is invaluable in reinforcement.
3. Ask them to note what they have learned and what effect it might have
4. Make time in the day for such a slot.

BASICS

THINGS TO DO EVERY DAY

1. Get them to tell you about other things they are interested in. **Everything is connected.**
2. Get them to bring in real world things that they think are relevant to their studying.
3. Get them to talk about it at appropriate times or during the town hall.
4. Encourage them to explore connections by drawing, brainstorming, discussing or simply stating.
5. Stand up scrums

Flow: The Psychology of Optimal Experience, by Mihaly Csikszentmihalyi (Harper Perennial, 1990)

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Gamestorming: A Playbook for Innovators, Rulebreakers, and Changemakers, 2010 by Dave Gray (Author), Sunni Brown (Author), James Macanuso (Author)

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Teaching Naked: How Moving Technology Out of Your College Classroom Will Improve Student Learning, by José Antonio Bowen (Jossey-Bass, 2012)

The Systems Thinking Playbook: Exercises to Stretch and Build Learning and Systems Thinking Capabilities 2010 by Linda Booth Sweeney (Author), Dennis Meadows (Author)

The Art of Changing the Brain: Enriching the Practice of Teaching by Exploring the Biology of Learning, by James E. Zull (Stylus, 2002)

How Learning Works: 7 Research-Based Principles for Smart Teaching, by Susan A. Ambrose, Michael W. Bridges, Michele DiPietro, Marsha C. Lovett, and Marie K. Norman (Jossey-Bass, 2010)

Make It Stick: The Science of Successful Learning, by Peter C. Brown, Henry L. Roediger III, and Mark A. McDaniel (Harvard, 2014)

What the Best College Teachers Do, by Ken Bain (Harvard University Press, 2004)

Bounce: The Myth of Talent and the Power Of Practice, by Matthew Syed 2011

THANKS

FULL REFERENCES STILL TO COME