

BUILDING THINKING CLASSROOMS

RESEARCH: @pgliljedahl
 SKETCHNOTE: @wheeler_laura

① Begin w/ a Problem

Give a problem-solving task

To start:

- Problems should be
 - engaging
 - not-curricular
 - collaborative
- ↳ promote talking

Later:

Problems can be curricular
 eg textbook problems

② Visibly Random Groups

- Randomly assigned
eg playing cards
- Daily & in front of students
- 2 or 3 students / group
- Sit & stand together



③ Vertical NonPermanent Surfaces

- Vertical
- Erasable
- WHITEBOARD
- CHALKBOARD
- WINDOW
- 1 marker or chalk per group
- ↳ promotes discussion



④ Oral Instructions

give instructions orally

Project

data
long expressions
diagrams

↳ groups will discuss (instead of decoding text)

⑤ Defront the room

Desks

orient in various directions

pull away from wall (room to stand @ VNPS)

Teacher addresses the class from a variety of locations.

⑥ Answering Questions

Acknowledge, but don't answer:

- ✗ Proximity questions (b/c teacher is close by)
- ✗ Stop thinking questions

Answer:

- ✓ Keep thinking questions
- ↳ give HINTS not answers

is this right?

⑦ Meaningful Notes

Student created:

- select
- synthesize
- reorganize

ideas

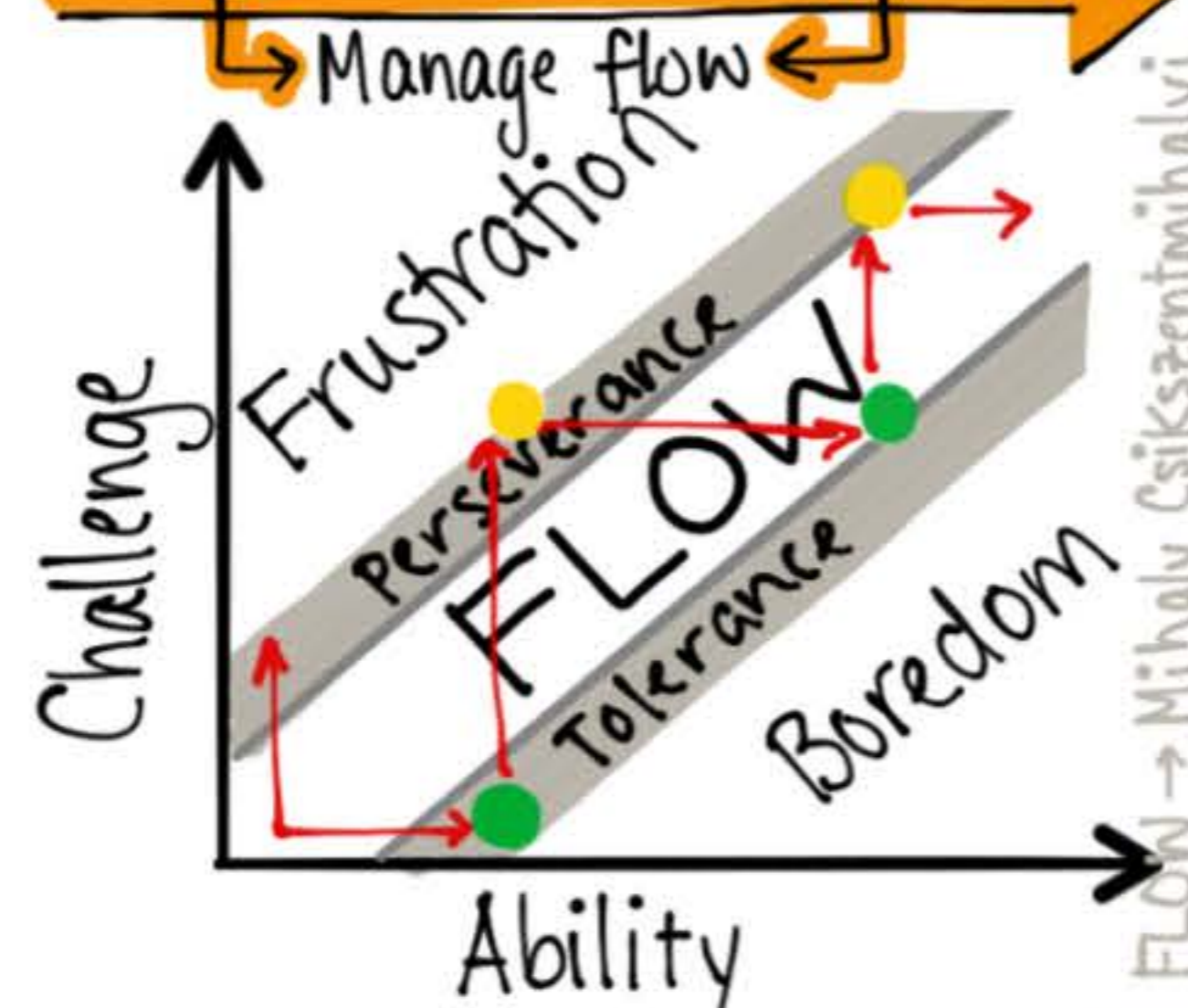
Based on their or others' boards

Provide time for this after levelling.

⑧ Build Autonomy

- Model how groups can visit other groups when they are stuck or done.
- Hints & extensions come from peers (not just the teacher).
- ↳ Helps manage flow

⑨ Hints & Extensions



⑩ Level to the Bottom

- debrief
- class discussion
- direct teaching the "lesson"

Once all groups pass a minimum threshold.

- Debrief 1 or more groups' solutions
- Work through a new problem w/ whole group

⑪ Check Understanding

Assign 4-6 "check for understanding" questions

Students choose to work

- individually
- in groups

at desks

on VNPS

Purpose: self-evaluation (NOT marks)

⑫ Formative Assessment

~~measure~~ → communicate

where student is currently

where student is going

Multiple & varied opportunities to demonstrate learning

can't doesn't isn't dis... completely always

⑬ Summative Assessment

PROCESS > product

Evaluate what you value!

Include:

- group
- individual

work

⑭ Reporting

Based on data (NOT points)

~~One aggregated mark~~

↳ disaggregated evidence

Analysis of data

Counting of points

What has this student learned?

What can they improve?