

Pillars of Effective Teaching

Improving student learning and teacher effectiveness

(this is not a pyramid scheme)

What can you do to improve your teaching?

4 aspects:

1. Physical environment
2. Time management
3. Instructional management
4. Teacher impact

Physical: Space and layout

- Accessible to everyone
- Efficient (non-disruptive to the lesson)
- Encouraging the behaviours they are intended for

Eg. Blackboard arrangement

Today in English Class:

- Review quiz
- Reading race
- “-ing” verbs
- “-ing” practice

Explanation space

Student answers

Homework
(if any)

Physical: Educational Technology

*Lessons should *not* be arranged around resources; resources should compliment the lesson!*

Resource	Effective	Ineffective
Slideshow	Use of pointers to direct attention, segmenting information, relevant multimedia content, recording student answers for later access, accessing pre-created information, visual impact	Disorganization/too many stimuli, information overload, visibility difficulties, no interaction
Music	Soundtracks, classical BGM for speaking activities to avoid “breaking the silence” anxiety	Loud, vocal-up, suspenseful, popular music that distracts
Graphic Organizers	Colour/shape-coded pictures, charts, information fragments that teachers/students can interact with for visual cues	Memes, size/colour/shape inconsistencies
Dice	Multi-option element of randomness in activities	“point” counters, unmatched number of options

Physical: Seating arrangement

Traditional rows

			0	#N/A	0	#N/A	0	#N/A	0	#N/A	
				#N/A		#N/A		#N/A		#N/A	
0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A
	#N/A		#N/A		#N/A		#N/A		#N/A		#N/A
0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A
	#N/A		#N/A		#N/A		#N/A		#N/A		#N/A
0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A
	#N/A		#N/A		#N/A		#N/A		#N/A		#N/A
0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A
	#N/A		#N/A		#N/A		#N/A		#N/A		#N/A
0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A	0	#N/A
	#N/A		#N/A		#N/A		#N/A		#N/A		#N/A
FRONT											

Pros:

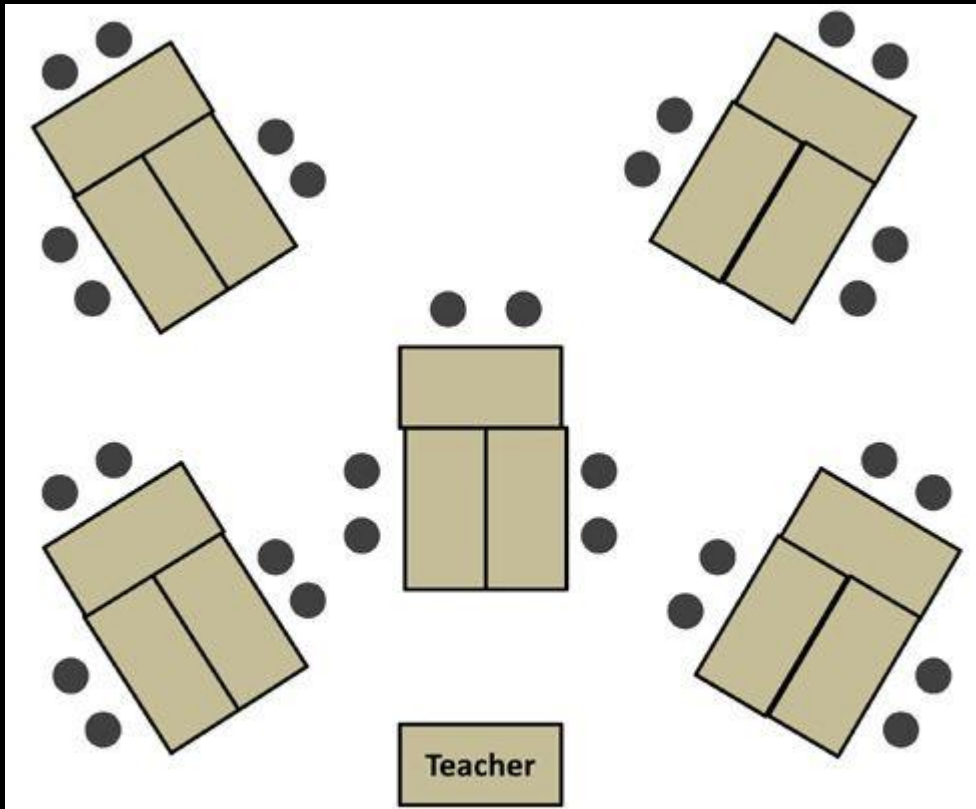
- Reinforces classroom management (disruptions less likely)
- Conducive to independent work
- Improved teacher behaviour

Cons:

- Only students in front/middle engaged
- Isolating (does not promote interaction)
- Harder to remember students
- Passive classroom

Physical: Seating arrangement

Groups



Pros:

- Good for discussion/peer assistance
- Conducive to group work/participation
- Active classroom
- Easy mobility

Cons:

- Encourages disruption
- Hard to monitor / manage
- Likely needs to be set up specifically for lesson
- Some students always facing away/rotating
- NG for individual /full-class activities
- Students in back not engaged

Physical: Seating arrangement

U-shape

		2703 #N/A #N/A	2608 #N/A #N/A	2704 #N/A #N/A	2605 #N/A #N/A	2702 #N/A #N/A
2708 #N/A #N/A	2615 #N/A #N/A	2611 #N/A #N/A	2602 #N/A #N/A	2712 #N/A #N/A	2714 #N/A #N/A	
2609 #N/A #N/A	2613 #N/A #N/A			2709 #N/A #N/A	2701 #N/A #N/A	
2711 #N/A #N/A	2617 #N/A #N/A			2706 #N/A #N/A	2612 #N/A #N/A	
2639 #N/A #N/A	2601 #N/A #N/A			2606 #N/A #N/A	2705 #N/A #N/A	
2607 #N/A #N/A	2707 #N/A #N/A			2710 #N/A #N/A	2618 #N/A #N/A	
FRONT						

Pros:

- Easy to arrange pairs (vertical/horizontal)
- All desks facing front means work is still individual
- No concentrated area of participation

Cons:

- Students in front row get nervous
- Isolating (does not promote interaction)
- Teacher movement limited
- Students constantly have to rotate in seats/move with little room

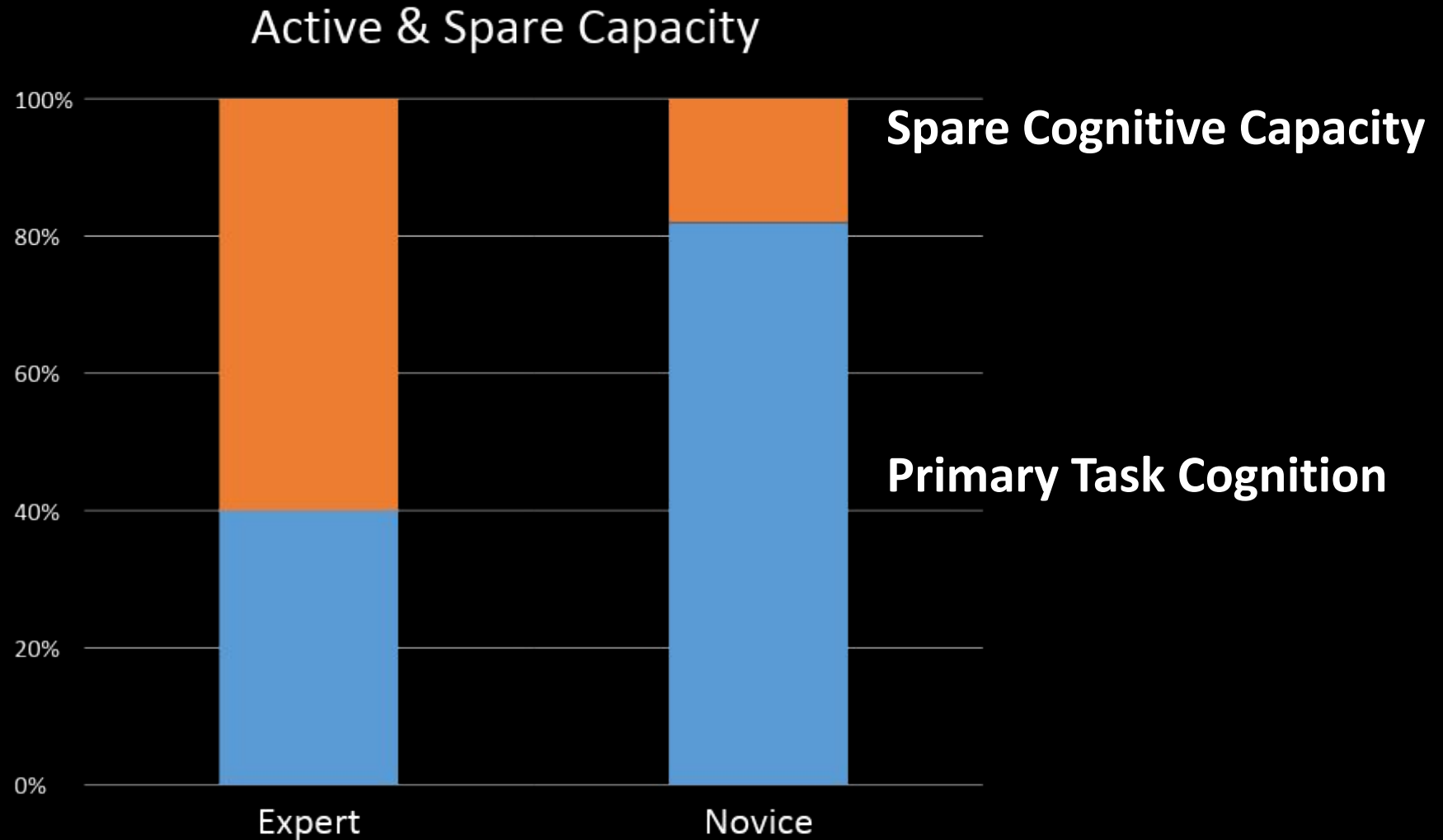
Physical: Tips

- Include your seating arrangement in your lesson plan. If it's consistent across lessons, ask students to arrange class before lesson. If ALT/OTE can get to class before the bell, start rearranging desks.
- Try to encourage the school to cover the legs of desks/chairs with tennis balls or chair socks, or ask students to pick up desks when moving. Loud transitions are distracting (and bad for those with noise sensitivity).
- Build habits and routines. Using the same resources / activities frequently in different lessons will make transitions more efficient.
- Encourage students to keep their desks free of clutter: have on it only what they need in that lesson, and everything they need that lesson. No looking for a pencil / book walls to sleep behind.

Time: Pacing

- Plan review activities for the end of lessons: comprehension check takes less time and can achieve the most important goal: understanding
- Check your lesson plan for what is **most important**. Move it as early in the LP as you logically can
- Leave time for questions or re-explaining. Better to have backup comprehension activities to reinforce learning then rush through content

Time: Cognitive Capacity



Time: Qualitative vs Quantitative Knowledge

- Quantitative knowledge: How much is understood
- Qualitative learning: How well it is understood

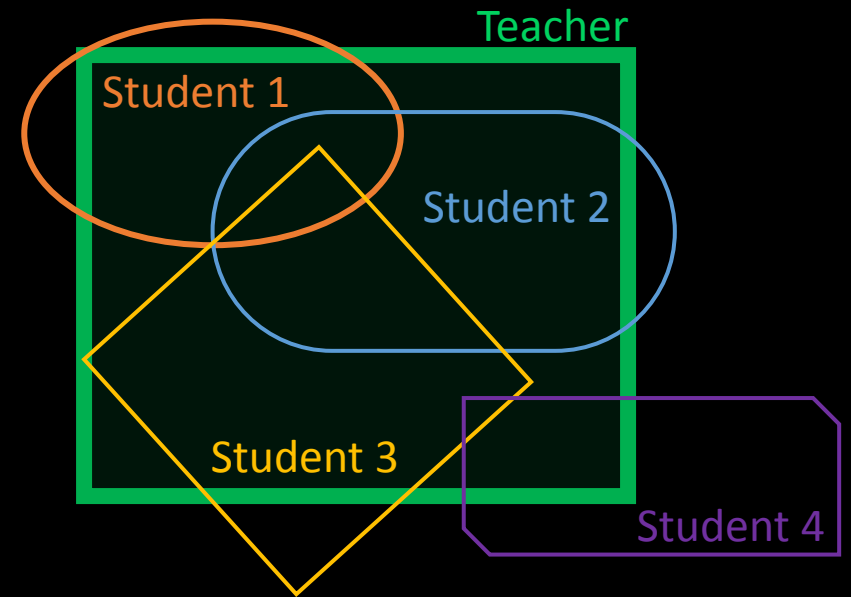


Qual: Knowing
where the items
are

Quan: Having the map

Time: Prior Knowledge

Learning:



Instructional: Organizing a lesson

- Big questions
- Graphic Organizers
- Conceptual Frameworks / “hooks”
- Threshold Concepts

Instructional: Continuity

- Refers to both connections between lesson topics, as well as review of information

- Approaches to learning:

Surface Approach:

- Focus on the signs (e.g. textual clues)
- Focus on discreet elements
- Memorize information and procedures for assessments
- Unreflectively associate concepts and facts
- Fail to distinguish principles/evidence, new/old info
- **Treat tasks as external imposition**
- Have an external emphasis (driven by external assessments, knowledge non-contextual)

Deep Approach:

- Focus on what is signified (text meaning)
- Relate/contrast new/old knowledge
- Relate concepts to everyday practice
- Distinguish evidence/argument
- Organize and structure content
- Have an internal emphasis (driven by personal / immediate reasons for learning)



Long-term retention

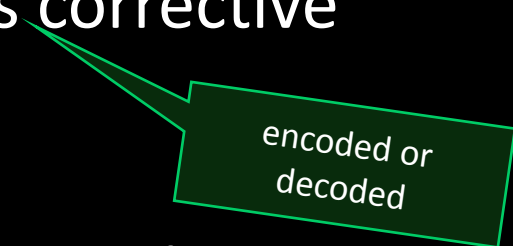
Instructional: Test-enhanced learning

Assessment of learning

- i) Answers marked but not necessarily given CF
- ii) At clear divisions or ends
- iii) High-stakes

Assessment for learning

- i) Always includes corrective feedback
- ii) Frequent and spaced out over time
- iii) low or no-stakes



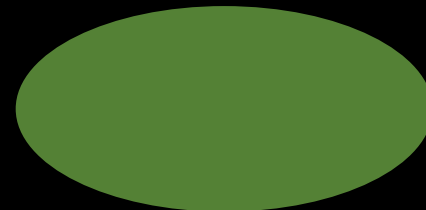
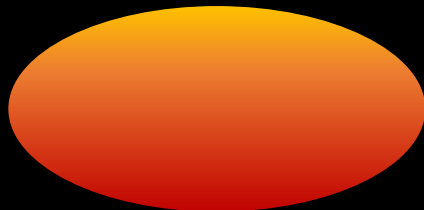
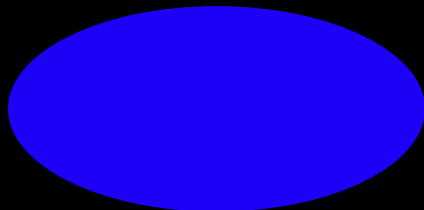
encoded or
decoded

Instructional: Reflection

- Journaling
- Letter exchanges
- Writing warm-up
- Exit slips
- Answering the Big Question
- 3-2-1
- Elimination facts

Pop Quiz!

1. Which long-term retention strategy is best for elementary school 6th graders?
2. What's the difference between conceptual frameworks and threshold concepts?
3. A tourist is lost at Sannomiya station and trying to get to Ikuta shrine. Google Map's GPS isn't syncing correctly. Give one example of quantitative teaching, and one of qualitative teaching.
4. Which of these colours would be most effective as a slideshow background in your 5th period lesson?



Teacher impact: Soft skills

- Hidden curriculum: the teaching of social, cultural, behavioural norms, values, and beliefs not openly intended to be taught or traditionally assessed
- Include: How to act in a group, morals, habits, hierarchical divides and the preservation of social privileges

Teacher Impact: Zone of Proximal Development (ZPD)

- “The zone between what a learner can do independently...and what cannot be done safely, even when assisted by a more competent member of the community” (Lave & Wenger, 1991, via Pratt & Smulders, 2016)
 - Content-based, independent of learner autonomy
- On the dependence-independence continuum: “far enough to challenge the learner, but not so far as to cause frustration and self-doubt”
- Exists for hard / soft skills too



Teacher impact: Self-improvement

- Student feedback
- Post-lesson reflection questions
 - What worked? Why?
 - What didn't work? Why?
 - Was the sequencing of material appropriate and helpful?
 - Was the pace appropriate?
 - What would you do the same next time?
 - What would you do differently?

*“What was learned is more important than
what was taught.”*

— Daniel D. Pratt & Sandra Jarvis Selinger

References and suggested readings

- <https://rdw.rowan.edu/cgi/viewcontent.cgi?article=2089&context=etd>
- <https://files.eric.ed.gov/fulltext/EJ1152568.pdf>
- https://www.researchgate.net/publication/243771420_Classroom_organization_and_management
- https://www.jstage.jst.go.jp/article/etr/34/1-2/34_KJ00007561986/article
- <https://cei.umn.edu/teaching-active-learning-classroom-alc>
- <https://globaldigitalcitizen.org/15-retention-strategies-remember-learning>
- Pratt, Daniel D., Smulders Dave et al. “Five Perspectives on Teaching: Mapping a Plurality of the Good.” Second ed. Krieger Publishing Company. 2016.