In response to reading Dan Willmingham (2010) *Why Don't Students Like School?* and recent exchanges, here's my revised table with some examples from some recent teaching.

Some implications that I understand of a Cognitive Psychology theoretical framework applied to pedagogy	**Some implications that I understand of social constructivist, sociocultural, aesthetic, and poststructural theoretical frameworks applied to pedagogy**	**Examples from a recent example on the theme of Pirates with YR**
The fundamental unit of mind is located in the individual	The fundamental unit of mind is found in community and society (Vygotsky)	We worked as a community to think and achieve more than is possible as individuals
Learning is cognitive	Learning is also embodied (active), affective, dialogic, social, ethical, and cultural	Children (and adults) were more often moving than being still (often as if divers and pirates) feeling (e.g. being on a sinking ship), in dialogue with others (e.g. exploring the island) considering ethical matters (e.g. should we trick the count's brother?) all the while building a classroom culture of collaboration
Learning is the individual acquisition and processing of information for recall and application. Teaching is training.	Learning is always social first and then individual (Vygotsky). Learning is about changing learning dispositions and developing social identities as 'learners' in a community (Holland; Lave	A Polish girl had a tutor who could translate and explain what was happening and without whom the girl would often have been

	& Wenger)). Learning is always metaphorical since we understand that A is un/like B (Lakoff & Johnson). Teaching is mediating learning - making a difference in developing understanding.	confused. This relationship made visible the way teachers can be supporting children. An aim was for the girl to identity as a member of the class community. The size of the pirate ship (A) was compared to the size of something they knew - the classroom (B).
A computer that processes the input-output of information is a core implicit metaphor for learning; the teacher trains people to 'operate' their minds	Social metaphors conceptualize classroom learning as more like learning collaboratively in an ensemble, teams, troupes, or families with a teacher taking primary (but not sole) responsibility as a leader	We both create a fictional team of divers and work almost entirely collaboratively as ourselves. Children could co-lead e.g. the boy who shared his drawing of diving equipment
Factual knowledge precedes skill; knowledge is viewed as being 'in' an activity (that should be as engaging as possible for the students)	Factual knowledge has to make sense to children – the more factual knowledge is actually experienced as embedded in active social situations where it is already being applied using skills that the children can participate in then the more children are supported into new factual, procedural (and conceptual) learning. Knowledge is integral to activities and not 'in' a task (Engestrom). Events that are 'interesting' to (most) students (and thus that tie	Information about ships (e.g. looking at photos of the Golden HInd) and then diving was contextualized in an active social situation of people trying to work out what we might see on the bottom of the ocean. Particular interests of the children were identified at the beginning in active responses

	in with their existing interests) are automatically engaging entry points into content.	to the question 'What did you like most about studying pirates?'
When teachers and students are thought of like thinking machines or computers then from a socio-cultural point of view teaching is like changing the mechanical/electronic dynamics. It's a short step to seeing people as interchangeable and more like thinking widgets/units rather than people with whole lives.	Teachers and students are people – the quality of their shared and different relationships all affect what and how they learn (cf. Noddings)	Over the previous year(s) the children had learned how to talk and listen to one another respectfully so they were able to do that
Learning is mostly about finding 'right' answers – the established facts, given knowledge, and 'the' meaning that experts have already worked out (and that teachers believe they need to know). What Bakhtin calls 'finalized' understanding.	Learning is always also about raising questions – creating knowledge, especially social understanding, that is both emergent and new to the participants in how they understand and remain open to new meaning – what Bakhtin calls 'unfinalized' understanding	For example, what would remain from the wreck after 300 years? How could you trick someone so they wouldn't find buried treasure?
Following the above, an 'inquiry' is much more of a Socratic dialogue where the teacher (or textbook) already knows the answers as intended outcomes	We learn via inquiry in the sense that people will pursue questions of interest to them and thus the complexity of a topic. An inquiry is a 'dialogic' (Bakhtin) exploration of a topic with others: the teacher-as-leader needs to know enough to ask 'essential' questions (Sizer) but does not need to know all of 'the' answers; teachers are learning alongside students	Two hours of YR work was an exploration of this essential inquiry question: what might we-as-divers find in the sea near the Blackbeard Hotel? Other subsidiary implicit inquiry questions included these: what might have happened on the day the ship sank? How would we dive and

		record what we can see?
Stories are ways of using narrative structures to transmit the complexity of information – the whole as well as the parts	Narrative is understood as a parallel to propositional knowledge as narrators/ storytellers make sense of the world (including theories about the world) from particular viewpoints that have epistemic frameworks embedded in them (Bruner)	The story of Blackbeard is a way of sharing historical, geographical, and factual information but also a way of giving a particular perspective on the pirate – as a man who wanted to scare rather than kill his victims
'Critical' thinking means higher-level (analysis and synthesis) individual thinking	Being 'critical' is critiquing the assumptions of the narrator of whatever 'narrative' is being told either explicitly (in a story) or implicitly (in a any person's interpretation of the world, including a theory); poststructural thinking critiques the power and the basis of the authority of those held up as being 'right' including what stories are not being told and who benefits from the narratives held up as 'true'	How reliable are the narrators of stories e.g. Did Blackbeard's decapitated body swim round his ship? Is this where his ship sank? With YN – should we believe and help the Duke? What might the brother say?
The teacher is primarily regarded as a provider of predetermined information presented in (ideally complex and engaging) sequences of preplanned tasks	The teacher, along with whatever 'tools' are available or introduced (including learning modes and the environment) is understood as opening-up/limiting students' social ability to mediate their meaning-making (Vygotsky). The teacher is promoting an ongoing dialogue (Bakhtin) with and	Tools include: stories about Blackbeard; narrative about plans for the hotel; an illustration of the pirate; a drawn map of the island; a wanted poster; photos of The Golden Hind; drawings made by

	among students	the children
Deep knowledge is knowledge of the parts in relation to the whole of a topic	The arts can introduce deep knowledge through the aesthetic holistic experience of core ideas/structures; the dramatic art of drama/theatre can employ strategies such as juxtapositioning to present contrasting views at the same time	The drawing of Blackbeard with his ship behind captures a holistic view of the pirate extended by the dramatized story told in context as if by Professor Taylor. With older children they could have created and presented tableaux of contrasting narratives as they advised on a display for the visitors' centre.
Teachers extend individual students' thinking by choosing 'moderate' challenge	Teachers create community social tasks that create 'zones of promixal development' for all children in which children can achieve socially beyond that they can do alone	Think of any authentic conversation (vs a lecture) between an adult and child. For example, about what might the 'photo' is showing is on the seabed – Brian-as-diver-colleague could ask questions, given information indirectly, press for deeper thinking etc.
Cognition early in training is fundamentally different from cognition late in training; children can become more intelligent through hard work	Yes, and … in the 'mantle of the expert' approach the 'mantle of expertise' is an expert (epistemic) framework for seeing 'the	We-as-divers 'see' the wreck as a whole across time and space – what happened as the

	whole in relation to the parts' (not an assumption that students think about content with the complexity of real life experts) so that teacher-with-students can identify 'gaps' in knowledge that we-as-experts need to learn (through sustained high-quality effort) and have the authority to use in meaningful events (and thus learn in tasks that create a ZPD in terms of extending their embodied social thinking/feeling)	ship sank affects what we are able to 'see' in the present as well as how we act in response e.g. being careful. What children identify as not in our 'photos' can guide subsequent explorations.
The imagination is primarily valued as part of the individual's thinking ability to create images in the mind. 'What is' (given knowledge) is by implication more important for young people than 'what might be'.	Social imagination is how people can together create images of 'what is' as well as 'what if …?' or 'what might be …?' beyond what individuals can create. Playing with possibilities is fundamental to learning (Vygotsky)	What if … we were on the ship when it went down? What might have happened? What might be on the seabed now? Let's imagine together in dramatic playing and in dramatic reflection as we draw and talk together.
Following from the above, drama is then more valued as functional role-play designed to transmit information	Dramatic playing, dramatic reflection, dramatic performance, and dramatic inquiry are all social learning modes in a real-and-imagined world that extend the possibilities for learning beyond what is possible when intending to learn given knowledge in the real world	Just talking with the children or only expecting them to play informally on the ship in the outdoor classroom would limit their meaning-making potential
Learning to be 'moral' can easily become limited to	Learning to be ethical is forming an ethical identity	In dialogue children can

learning to understand concepts/rules/principles already worked out by others	over time in dialogic explorations of contextualized ethical dilemmas	explore core questions like these: How do we live together as a community?