Dan Willmingham (2010) *Why Don't Students Like School?*

There's very little in Willmingham's book that I don't agree with. It's just that his view is limited and cannot conceptualize the complexity of learning and teaching. Fair's fair, he's a cognitive scientist so his theoretical framework is based on his understanding of the best that cognitive scientists have discovered in empirical research. As such he's bringing the complexity of his deep knowledge to the classroom in ways that would significantly improve teaching. His premises include the following that I extend by contrasting them with some of the core assumptions I bring to my struggle to understand learning and teaching:

Cognitive Science theory applied to pedagogy	Social constructivist, sociocultural, aesthetic, and poststructural theories applied to pedagogy
The fundamental unit of mind is located in the individual	The fundamental unit of mind is found in community and society (Vygotsky)
Learning is cognitive	Learning is also embodied (active), affective, dialogic, social, and cultural
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 & Wenger)). Learning is always metaphorical since we understand that A is un/like B (Lakoff & Johnson). Teaching is mediating (making a difference in) learning.
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
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 in with their existing interests) are automatically engaging entry points into content.
Teachers and students are fundamentally interchangeable – they are widgets/units in a mechanistic/electronic view of learning and teaching	Teachers and students are people - relationships affects what and how they learn (cf. Noddings)
Learning is mostly about finding right answers – the given knowledge and 'the' meaning that experts already know (and that teachers believe they need to know). What Bakhtin calls 'finalized' understanding.	Learning is always also about raising questions – creating knowledge that is both emergent and new to the participants in how they understand and remain open to new meaning – what Bakhtin calls 'unfinalized' understanding
Any inquiry is 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
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) (Bruner)
'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 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'
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 among students
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
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
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 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)

Imagination is limited to the individual ability to create images in the mind of 'what is'	Imagination is how people create images of 'what if …?' or 'what might be …?' Playing with possibilities is fundamental to learning (Vygotsky)
Drama is limited to 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
Learning to be moral is learning to apply given rules/principles more abstractly	Learning to be ethical is forming an ethical identity over time in dialogic explorations of contextualized ethical dilemmas