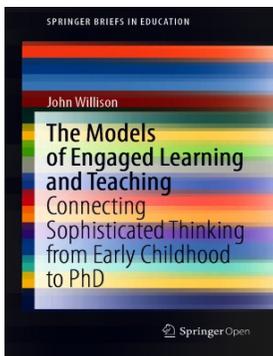


## **The Models of Engaged Learning and Teaching (MELT): Connecting Sophisticated Thinking from Early Childhood to PhD by John Willison**

Reviewed by

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The book *The Models of Engaged Learning and Teaching (MELT): Connecting Sophisticated Thinking from Early Childhood to PhD* seeks to reach an audience that includes teachers, principals, academics, communities, education systems, educational policymakers, parents, and learners/students. The persons that would find this book the most useful would be teachers, principals, and graduate-level students for application and use. The book seeks to develop the connectedness of the hidden similarities found in teaching and learning at all education levels. The author states, "The purpose of this book... is to connect disparate energies and ideas of education through the MELT to facilitate students' development of sophisticated thinking" (Willison, 2020). The sophisticated thinking triggers thought. Facilitated by MELT adaptation and is used in many content-rich contexts as opposed to content-specific terminology or definitions.

The connectedness in similarities of learning versus the differences helps students to solve complex problems, think critically, and make evidence-based decisions more effectively. Why is this important? We find that the wisdom of man and his desire to innovate and learn creates a circular

system which, in some cases, creates new problems which again need solving through innovation. The MELT provides a way to gather and connect educational ideas and energies that may help us to break out of the vicious circle of innovative solutions that causes more problems.

Because we teach students in silos of distinct content subjects with little to no connectedness, especially in the United States of America, most fail to think critically about broadly connected issues in their education. Many educators believe a more integrated curriculum and teaching would be highly beneficial to student learning, but the existing education structures create barriers for change. MELT is frequently put into action to help students understand their sophisticated thinking and see more clearly the purpose of their education that necessarily revolves around the further development of that thinking. It is not easy for teachers to have or develop a sense of purpose for students that goes beyond the immediacy of daily lessons to the big picture, mainly when the teacher is limited to a single content-area knowledge.

The main ideas found in the seven chapters of this informative teaching and learning resource book presents the MELT model sequentially. The seven chapters specify the seven core components of the MELT Model. Those components are the six learning processes or facets found in the Model and learning autonomy. The author also integrates the seven thinking questions of the Model as the title of each chapter. MELT is a thinking routine; it is the implementation of thinking strategies that students have learned to use. They are most effective when the students use the thinking strategies so often that they become second nature to them. Students respond to or initiate their direction and clarify it while considering ethical, cultural, social, and team (ECST) issues.

When presenting learning content and learning through delving in mutually exclusive ways in MELT, they belong to the same continuum of learning autonomy. Rather than conflicting with each other, they are complementary. While this book has emphasized learning autonomy, teachers themselves need to model different levels of autonomy. Autonomy and ownership are crucial dimensions for teachers because MELT only works when educators make the models their own.

Chapter 1 What is our purpose? It provides the purpose of the book and defines the seven core components of the Model. MELT comprises the six facets of sophisticated thinking elaborated along a continuum of learning autonomy. As detailed below, each facet consists of names made of active verb couplets, the affective adjective, and a matching question. They are as follows: 1. Embark & Clarify – Curious – What is the purpose? 2. Find & Generate – Determined – What do we need/ What will we use? 3. Evaluate & Reflect – Discerning – What do we Trust? 4. Organize & Manage - Harmonizing – How do we arrange? 5. Analyze & Synthesize – Creative –

What does it mean? 6. Communicate & Apply – Constructive – How do we relate? The facets are processes that cannot act independently, and they are wholly dependent on the educator's ability to understand the learning they are facilitating in the adoption of the facet. As part of the interconnectedness of the spectrum of learning from primary school to Ph.D. level, the facets are connectable skills relative to transferable skills.

Chapter 2 asks the question, what will we use, in light of our educational purposes? It provides the foundational education literature that informs the MELT. This foundation is descriptive, and it provides a conceptual framework, but it does not rise to a theoretical framework. Students find information and tools and generate data/ideas using appropriate methodologies.

Chapter 3 question is how do we arrange? It provides examples of teachers using MELT to organize and prompt more sophisticated thinking across the education trajectory. MELT is applicable across many contexts, and there are many models across educational levels. The book also incorporates links to its MELT website that provides tools and examples of worksheet modeling MELT at the various educational levels. Students evaluate the credibility of sources, information, data, and ideas and, through reflection, make their learning processes visible.

Chapter 4 asks, what do we trust? Denotes the productive tensions between competing theories as to the underpinning of MELT and designates their place on the learning autonomy continuum to arouse awareness of choice. This chapter discusses the three theoretical orientations of learning: Objectivism. Social Construction and Personal Construction. Objectivism becomes a metaphorical perspective or reference point from which to view learning, not as the correct way to perceive learning. The book treats the three theories as points of reference that compete in the MELT, rather than places from which to stand and capture insights into educational processes. Students organize information and data to reveal patterns/themes and manage teams and processes.

Chapter 5 What does it mean? Considers contemporary learning theories and details what they mean for educational practice and teachers action research examining MELT. This chapter shows explicitly the connections between four contemporary and sometimes direct opposition learning theories. The four conceptualizations are 1. Meyers and Land's Threshold Concepts, 2. Sweller's Cognitive Load Theory, 3. Siemen's Connectivism 4 and Schon's reflective practitioner. The book suggests complementary treatment of educational theories rather than competition to facilitate sophisticated thinking. Students analyze information/data critically and synthesize new knowledge to produce coherent individual/team understandings

Chapter 6 asks how they relate? It considers humanity its relationship to itself and the planet in that man is on a potentially destructive trajectory in his problem-solving. The book suggests that MELT could be a valuable part of the solution that does not cause more societal detrimental problems. Students apply their understanding and discuss, listen, write, perform, respond to feedback, and present processes, knowledge, and implications while heeding ethical, cultural, social, and team (ECST) issues and audience needs.

The last chapter asks how much guidance? It tackles the issue of how much scaffolding is needed for student learning, using MELT's consideration of learning autonomy. Autonomy in MELT closely connected to ownership is a relationship word of teaching and learning. It asserts that sophisticated thinking and learning are messy; they are spirals; they are recursive and tend to be anything but directly sequenced. Learning autonomy, as defined by Leslie Dickerson, "is a situation in which the learner is totally responsible for all the decisions concerned with learning and the implementation of those decisions." (Dickinson, 1994). A continuum provides for low autonomy where student learning responsibility is very low (emulate), and teaching responsibility is very high to student learning responsibility very high (improvise), and the teaching responsibility is very low. The continuum of learning autonomy is the how of learning. Teaching is the development of the facets. It is the educator's implementation of the sophisticated thinking process and how it is scaffolded and developed for her unique set of learners so that they understand their engagement in the learning process. MELT suggests that the learning environments needed for a promising future are ones in which every point provides value on the learning autonomy continuum.

The strength of this book is that it uses narratives, metaphors, and analogies to convey its message. It incorporates a cartoon to help engage the reader and focus their thinking before delving into the heavy concepts found in the text. And it includes comparatives of various levels of the Model-based on different narratives, including the development and utilization of the facets at every level. A weakness of the book is that it tries to do too much in one book. The website is needed to provide further support for this weakness.

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