

"Small Teaching: Everyday Lessons from the Science of Learning" by James M. Lang is a book that explores practical, easily implementable teaching strategies based on the principles of cognitive psychology and the science of learning. Below is a detailed overview of the contents, takeaways, and a summary of the book:

Contents:

Introduction: The Model of Small Teaching

• Introduces the concept of "small teaching" and sets the framework for applying incremental changes to teaching practices.

The Core Principle: Knowledge Is a Consequence of Experience

• Explores the idea that knowledge is constructed through experience, emphasizing the importance of active learning and engagement.

Small Teaching Strategy 1: Retrieval Practice

• Introduces the concept of retrieval practice as a way to enhance long-term retention and understanding.

Small Teaching Strategy 2: The Retrieval Micro-Quiz



• Provides practical guidance on implementing microquizzes to promote retrieval practice and improve learning outcomes.

Small Teaching Strategy 3: The Minute Paper

• Introduces the minute paper as a formative assessment tool to gauge student understanding and provide feedback.

Small Teaching Strategy 4: The Muddiest Point

• Discusses the muddiest point activity, a simple technique to identify and address areas of confusion in the learning process.

Small Teaching Strategy 5: The One-Minute Message

• Explores the effectiveness of concise, focused messages in delivering key concepts and enhancing student understanding.

Small Teaching Strategy 6: Intermittent Recall

• Introduces the concept of intermittent recall and spaced repetition to reinforce learning over time.

Small Teaching Strategy 7: The Space Survey

• Discusses the space survey as a way to encourage active reflection and promote a positive learning environment.



Small Teaching Strategy 8: Cues, Questions, and Advance Organizers

• Explores the use of cues, questions, and advance organizers to guide students' attention and enhance learning.

Small Teaching Strategy 9: The 3/2 Technique

• Introduces the 3/2 technique for promoting active engagement and participation in the classroom.

Small Teaching Strategy 10: Interactive Lecturing

• Discusses practical strategies for transforming traditional lectures into interactive and engaging learning experiences.

Small Teaching Strategy 11: Concept Mapping

• Explores the use of concept mapping as a visual tool to help students organize and connect ideas.

Small Teaching Strategy 12: The Case Study

• Introduces the case study approach as a way to promote critical thinking and problem-solving skills.

Small Teaching Strategy 13: The Discussion Board

• Discusses best practices for designing effective online discussion boards to facilitate meaningful interaction and learning.



Small Teaching Strategy 14: Email

• Explores ways to use email communication strategically to foster student engagement and address common challenges.

Small Teaching Strategy 15: The Teaching Persona

• Discusses the concept of the teaching persona and how it can impact student engagement and learning.

Small Teaching Strategy 16: The Sprint

• Introduces the concept of the sprint—a short, focused burst of activity or learning—to enhance motivation and productivity.

Small Teaching Strategy 17: The Music of the Spheres

• Explores the role of aesthetics and the learning environment in creating a positive and conducive atmosphere for learning.

Conclusion: The Oxygen Mask Rule

• Summarizes the key principles of small teaching and emphasizes the importance of self-care for educators.

Takeaways:

Incremental Changes:



• The book advocates for small, manageable changes to teaching practices, emphasizing the cumulative impact of these incremental improvements.

Active Learning Techniques:

• Lang introduces practical strategies such as retrieval practice, micro-quizzes, minute papers, and muddlest points to promote active learning and student engagement.

Formative Assessment:

• The importance of formative assessment is highlighted through strategies like the 3/2 technique, space survey, and concept mapping to gauge student understanding and provide timely feedback.

Technology Integration:

• The book explores the strategic use of technology, including online discussion boards and email communication, to enhance student engagement and learning.

Focus on Learning Environment:

• Lang emphasizes the significance of the learning environment, both physical and virtual, in creating a positive and conducive atmosphere for learning.

Cognitive Science Principles:



• The strategies presented in the book are grounded in cognitive science principles, making them evidence-based and effective for promoting deep learning.

Summary:

"Small Teaching" provides a wealth of practical for educators to enhance their teaching strategies based on the science of learning. Lang practices advocates for small, manageable changes that can have a significant impact on student engagement and learning The book is a valuable resource for outcomes. instructors seeking evidence-based, easily implementable techniques to make their teaching more effective and From retrieval practice to enjoyable. interactive lecturing and technology integration, the book covers a diverse range of strategies applicable to various teaching contexts. The focus on active learning, formative assessment, and creating a positive learning environment aligns with the goal of fostering deep and meaningful learning experiences for students.