Contents

Introduction
Designing Lessons for Authentic Engagement 1
The Pitfalls of False Engagement 1
Authentic and Measurable Learning with the Triple E Framework 3
What's in This Book 5

Chapter 1
What We Know About Technology Integration 9
Instructional Strategies in Technology Integration 10
Engagement 12
Access 13
Application of Use 14
Authenticity and Prior Knowledge 15
The Significance of Co-Use 16
Chapter Take-Aways 18

Chapter 2
Building on the Current Frameworks 19
TPACK Framework 20
TIM Framework 23
SAMR Model 24
A Framework That Focuses on Learning Goals 26
Chapter Take-Aways 27

Chapter 3
The Triple E Framework and the ISTE Student Standards 29
Components of the Framework 30
How the Framework Aligns with the ISTE Student Standards 35
Chapter Take-Aways 37

Chapter 4
Defining Engagement 39
Active and Social Engagement 40
Time-on-Task: Focus on Learning Goals 41
Strategies to Promote Engagement 41
A Look at Tools That Promote Engagement 43
Scenarios of Engagement 45
Engagement Overview 53
Chapter Take-Aways 54

Chapter 5
Defining Enhancement 55
Adding Value 56
Scaffolds and Supports to Deepen Learning 57
A Look at Tools That Promote Enhancement 58
Scenarios of Enhancement 61
Enhancement Overview 69
Chapter Take-Aways 70

Chapter 6
Defining Extension 71
Authenticity Is Key 72
A Look at Tools That Promote Extension 74
Scenarios of Extension 75
Extension Overview 82
Chapter Take-Aways 83

Chapter 7
The Triple E Measurement Tool 85
Using the Measurement Tool 86
Reading Results 87
Revisiting Scenarios 88
Chapter Take-Aways 94

Chapter 8
Examples from the Field 97
Case Study 1: Scavenger Hunting for French Cultural Connections 98
Case Study 2: PLTW Sun, Moon, and Stars 102
Case Study 3: Flint Water Crisis: A Project-Based Unit 110
Case Study 4: Elapsed Time and Sled Dog Racing 115
Case Study 5: UN Poets 117
Case Study 6: Bridge Challenge Project 122
Case Study 7: Life Science and Storybooks 125
Case Study 8: All-American Road Trip 129
Case Study 9: Graphing Stories 133
Case Study 10: Civilization Creation 136
Case Study 11: E-Mentors 142
Case Study 12: Simulated Gaming 145
Chapter Take-Aways 151

Chapter 9
Instructional Support Strategies 153
Instructional Strategies 154
Adding Value and Integrating Strategy 159
Chapter Take-Aways 162

Chapter 10
Evaluating Software for Learning 163
Evaluation of a Tool Using the Triple E Framework 164
Online Resources 169
Chapter Take-Aways 170

Appendix A
Lesson Planning Template Based on the Framework 173
Example Lesson Plan 173

Appendix B
References 199

Index 207