

Backwards Planning



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Table of Contents

Foreword	7
Introduction: The Foundations of Great Teaching.	9
To Become a Great Teacher You Must.....	10
One More Prerequisite.	13
An Overview of This Book	14
Chapter 1: The Big Ideas Behind Backwards Planning.	17
Research That Supports Backwards Planning	19
What Is Understanding by Design?	21
Stage One: Identify Desired Results	22
Stage Two: Determine the Assessment Evidence	23
Stage Three: Plan Learning Experiences and Instruction	24
Backwards Planning Overview	25
Conclusion	28
Reflection	28
Chapter 2: The Principles of Backwards Planning.	29
The Nature of Understanding	30
How We Construct Meaning: Constructivist or Project-Based Learning.	37
Conclusion	42
Reflection	42
Chapter 3: What to Consider Before Planning a Unit of Study	43
Breadth Versus Depth	44
The Quick-Fix Failure	44
Topics and Subjects to Teach with Breadth	45
Topics and Subjects to Teach with Depth.	47

On All Levels: Teach for Transfer of Knowledge	48
In Planning for Enduring Understanding, Less Is More.	49
You Design the Curriculum.	49
An Array of Implementation Schemes.	51
Designing Your Own Units of Study.	58
Conclusion	59
Reflection	60

Chapter 4: Planning Units of Study

with Your End Goal in Mind.	61
Identify the Desired Results.	62
SMART Goals.	64
A Sample Unit on Ecology	66
Choosing Essential or Guiding Questions.	76
Establishing Learning Targets: What Students Will Know and Be Able to Do	80
Developing the Culminating Activity	83
Conclusion	85
Reflection	86

**Chapter 5: How Assessments Can Help You Target
Your Teaching**

87	
Making Informed Decisions	88
Using Multiple Measures: The Snapshot Versus the Photo Album.	89
Types of Assessments.	91
Observing Student Behavior to Inform Instruction	93
Determining More Formal Assessments to Use	97
Evaluating Formative Assessments	98
Evaluating Summative Assessments.	98
Conclusion	99
Reflection	99

Chapter 6: Choosing and Using the Right Assessments . . .	101
Assessment Checklist	102
Choosing Assessments for the Ecology Unit	103
Designing Your Own Checklists and Scoring Rubrics	105
Peer Feedback and Student Self-Reflection	111
Conclusion	115
Reflection	115
Chapter 7: Developing Effective and Engaging Daily Lesson Plans	117
Prioritizing	118
Informational Versus Procedural Goals	119
Choosing Effective and Engaging Daily Learning Activities	127
Encouraging the Passive Learner	129
Learning Styles	132
Conclusion	133
Reflection	134
Chapter 8: Digging Deeper, Going Further	135
Differentiating Units of Study to Meet the Global Challenge	135
The Need for Differentiation	137
Connecting Differentiated Instruction to Backwards Planning	139
Differentiation by Content	144
Differentiation by Process	147
Differentiation by Product	148
Conclusion	150
Reflection	150

Chapter 9: Managing a Differentiated Classroom and Some Final Thoughts	151
Room Setup	152
Resources	152
Managing Materials	153
Independent and Group Work	153
Record Keeping	156
Conclusion	156
Reflection	157
Appendix A: Gradual Release of Responsibility Model	159
Appendix B: Backwards Planning At-a-Glance	161
Appendix C: Planning Your Own Unit of Study	163
Appendix D: Sample Unit Overview Grid for the Ecology Unit	164
Appendix E: Strategies for Differentiation by Content	165
Appendix F: Strategies for Differentiation by Process	167
Appendix G: Strategies for Differentiation by Product	169
References Cited	170
Vocabulary Reference Guide	177
Additional Resources: Websites	189

An Overview of This Book

The essential question that this book addresses is how to design units of study and lessons so that students achieve enduring understanding. When you teach for enduring understanding, your students do not simply memorize isolated facts, which may seem pointless to them; rather, they mull over interesting big ideas and construct their own meanings about the underlying concepts that define a topic. Students learn how to apply their knowledge in new situations and use what they know to solve real problems.

However, one looming question remains: How can this be accomplished in a way that is manageable? Lofty ideals are great, but it is important to be practical. Professor Seymour Papert from MIT (2009) rightly pointed out that teachers cannot just be preoccupied with what they could do someday. They need to know what they can do on Monday.

Let's face it—teaching is a highly stressful job. Teachers are responsible for what students in their classrooms learn on a daily basis. But that's not all. Teachers also share responsibility for the motivation, the emotional well-being, and the confidence of the children they serve, and they must answer to administrators and parents, as well as to students. Teachers are very busy people, and one thing is certain: They are never given enough planning time. Teaching for enduring understanding is a great idea, and like other great ideas, it can lead to great results. However, this type of teaching takes time and effort to learn.

As Albert Einstein once said, “Any intelligent fool can make things bigger, more complex.... It takes a touch of genius—and a lot of courage—to move in the opposite direction. Everything should be made as simple as possible, but not simpler.” The purpose of this book is to demystify the planning process. It is to show educators how to plan for students' enduring understanding in the simplest, most practical way possible without watering down the richness of the process. In this book, we explore both the reasons for teaching for enduring understanding, and the specific procedures for making this type of planning as simple, effective, and efficient as possible.

This book progresses through three main ideas: The rationale and research behind Backwards Planning, how to use Backwards Planning to design a unit of instruction, and how to keep differentiated instruction and classroom management at the heart of lesson design.

Chapter 1 discusses the basic components and principles of Understanding by Design (or Backwards Planning).


Chapter 2 examines what “understanding” actually means, how students construct meaning, and different ways that students can demonstrate depth of understanding. This chapter also introduces six facets of learning that should be taken into consideration while planning.

Chapter 3 discusses the tradeoffs between breadth vs. depth instruction and deals with how to decide which topics lend themselves to in depth study. This chapter also details different ways to design units of study using Understanding by Design principles.

Chapter 4 addresses Stage One of Backwards Planning. It explains how to determine the goals of your unit of study. It deals with using standards, determining the big ideas, writing essential (or guiding) questions, establishing learning targets, and developing exciting and authentic culminating projects. This chapter also features an ecology unit that you can use as a model for your own planning.

Chapter 5 addresses Stage Two of Backwards Planning. It examines different types of formal and informal assessments that give you the information you need to teach effectively.

Chapter 6 focuses on selecting or creating assessments and rubrics that promote student understanding. It describes a format for peer feedback groups that will help your students work constructively with one another, and it describes ways that you can respond to your students to optimize their achievement.



Chapter 7 deals with Stage Three of the Backwards Planning process. It is filled with ideas about how to plan effective and engaging daily lesson activities. It gives you step-by-step techniques that will help your students master information, apply what they know to create something original, and solve novel problems.

Chapter 8 deals with the paradigm shift that schools face in preparing students for the global challenges of the future. It explores the need for instruction targeted toward students' needs, interests, and learning styles, and shows how differentiated instruction can be tied to the Backwards Planning model. This section gives specific ideas on how to effectively differentiate instruction through content, process, and product.

Chapter 9 explores ways to organize and manage a student-centered classroom, including ideas for room set-up, establishing procedures for group work, and efficient record-keeping techniques.

Several Appendices contain templates, planning tools, and lesson ideas to help you as you begin your own journey through Backwards Planning.

Simple Overview of Backwards Planning Principles

Stage One: Identify Desired Results

What should my students know, understand, and be able to do? What is worthy of understanding? What enduring understandings are desired? (Wiggins and McTighe 1998). What are the goals at the heart of your unit of study? The following design principles will help you identify your end results:

Determine the Content Standard(s) (Established Goals)

- What are the standards (local, state, national) for the coursework you are teaching?
- What are students expected to learn?

Determine the Big Idea(s) or Enduring Understanding(s)

- What are the big ideas (universal concepts that have enduring relevance) at the heart of the subject or topic which you are teaching?
- What are the likely misunderstandings that need to be addressed?

Determine the Essential or Guiding Question(s)

- What open-ended, thought-provoking questions will foster disciplined inquiry and investigation?
- What questions will call upon students to examine their own experiences and content knowledge?
- What questions will help students use and build knowledge effectively over time?

Determine the Student Objectives

- What observable and measurable outcomes can you assess?

Determine the Knowledge Learning Targets

- What facts, concepts, and principles do students need to learn in order to reach the goals?

Determine the Procedural Learning Targets

- What procedures, strategies, methods, and skills will students be able to use as a result of this unit of study?

Design the Culminating Activity

- How will students demonstrate that they really understand and can apply the big ideas of the unit of study (e.g., projects, presentations, performance assessments, assignments, or tasks)?
- How can this culminating experience be authentic so that it has relevance beyond the classroom?

Choosing Effective and Engaging Daily Learning Activities

In planning your daily lessons, it is you who must determine which instructional practices will be most effective in helping your students to make appropriate connections, understand the underlying principles or the big ideas of the unit, and apply what they are learning to solve new problems.

According to Wiggins and McTighe (1998; 2005), in order to design “a good plan for learning, in light of goals,” the activities you give students must be both “engaging and effective.” Wiggins and McTighe define an engaging lesson as one that draws all the diverse learners in your classroom into the subject or topic “by the nature of the demands, mystery, or challenge,” of the assignment or activity that they are expected to complete. This does not mean that assignments are structured so that learners merely enjoy the work, but that they are “worthy of their intellect, centered on big ideas and [contain] important performance challenges.” Wiggins and McTighe define effective activities as ones that make the learner more “competent and productive at worthy work.”

For lessons to be both effective and engaging, the big picture must be clear to the students throughout the unit of study. Activities should lead to the goals of instruction. They should be hands-on, rooted in interesting real-world applications, and challenge students in a safe but meaningful way. Since different students have diverse strengths and needs, there should be more than one way for students to demonstrate their understanding. Students must also know what is expected of them, be able to monitor their own progress, get specific and timely feedback, and learn from their mistakes. Students should be asked to do things that truly matter.

As you plan your daily lessons, you may find it useful to use the checklist on the next page.