
Preface

For more than 25 years I've had the incredibly good fortune to work in a field of educational research sometimes referred to as "brain-based" learning. I've been involved from a variety of angles: from developing one of the very first summer programs for kids based on these emerging concepts in the early 1980s, to earning a PhD in Educational Psychology with a focus on brain research in the mid-1990s, to working directly with teachers for more than a decade on how to actually *apply* these ideas in the classroom. As the field has developed and expanded, I've witnessed some amazing changes in our understanding of what conditions are necessary for effective teaching and learning.

For example, we now know that traditional lecture-based teaching doesn't work for most students. Clear recall depends on students having more than one *type* of memory of a subject. Effective learning requires more than just hearing, reading, or writing about content. As well, teachers need to create additional *layers* of memory by getting students to emotionally engage with the content, or to move, draw, sing, or act it out.

In fact, as the fledging area of brain-based learning research has grown, and the results from studies in diverse areas of brain research and practical observation have started to support and enhance each other, it has become clear that its findings don't relate to one *single* teaching strategy. Instead, we are seeing the rise of critical *themes* for effective teaching—themes that gave rise to this book.

This book is not about one single idea, but about a new philosophy for education, called "Green Light" teaching, which incorporates many *different* teaching techniques. Too often the latest hot idea takes education by storm, and is pushed on teachers at every level to the exclusion and detriment of some excellent teaching strategies. Then, when the driving force behind this latest trend fades, and the idea runs out of steam, it is dropped completely, and the next hot concept leaps into the yawning gap.

For this reason, rather than offering yet another "perfect" way that every classroom **MUST** be conducted, the Green Light teaching approach outlined in this book simply encourages teachers to move *away* from Red

Light teaching, meaning away from “the way it has always been done.” This process of moving away will drive teachers to adopt new approaches, strategies, techniques, concepts, and ideas that will lead to better results at every level of education.

The Green Light strategies outlined in this book offer teachers a starting point for this journey. They model the Green Light philosophy of instruction in a series of research-supported, practical strategies. These strategies will hopefully be useful in themselves, yet perhaps more importantly, they may serve as a jumping off point for teachers to consider other dynamic methods of teaching.

This point begs the question: Why do we need to change our way of teaching? The reason is simultaneously simple and controversial. It is the fact that, despite governments around the world pouring money into education, as stated previously, **traditional lecture-based teaching methods still do not work for the majority of students today**. I believe that, for many people, traditional teaching has never been particularly effective. But especially today, when our students exist in a high-speed, Web-enabled world that gives them intense stimulation and instant gratification, the percentage of students who actually learn in a lecture-based format is now precariously small. This is why we must adopt a new philosophy of teaching that focuses on how to best support our twenty-first-century students in understanding, remembering, and applying educational material.

How This Book Developed

Since the primary objective of this book is to be a practical guide to help teachers develop more effective lessons, in the conceptual stage of manuscript development I asked teachers I have worked with around the world to tell me what strategies were most effective with their students. I asked them to very briefly summarize the old way of teaching the topic (Red Light), how they were now teaching the same topic (Green Light), and the effectiveness of the strategy. That is what you will see in this text: real lessons, written and delivered by real teachers, and the outstanding results their students are really achieving.

These lessons offer clear, concrete examples of how to apply each strategy, how to weave it into lessons, and how to bring it to life in a real and practical way. Rather than providing only a single example of each idea in action, all of the chapters contain a series of demonstration lessons, followed by my own thoughts, reflections, and ideas concerning the best ways of applying the primary Green Light strategy under discussion.

It is worth mentioning that I didn’t choose the strategies that define the chapters of this book in advance. Rather, I began by listing some themes

that I believed—based on a quarter century’s experience in the field—were important in effective teaching. I then prompted the contributors to send me lessons that fit best with these themes, most of them deliberately defined quite vaguely to avoid leading their thinking. As I expected, some of the lessons clearly demonstrated the effectiveness of many of the emerging themes in brain-based teaching. Yet others prompted me to think about different strategies I hadn’t previously considered. The strategies included in this book, then, are certainly backed by academic research; however, they are also supported by what can quite accurately be labeled “action research”: research done on real kids, in real classes, by real teachers.

As a result, this book has evolved into a compendium of very clear instructional strategies, presented by both demonstration lessons and a discussion of how to apply these ideas in almost any classroom, covering almost any content, with any age student. I encourage readers to explore this book while asking, “That’s how *they* applied the strategies, so what does that tell me about how *I* can apply them in my own classroom?” If this thought is uppermost in the reader’s mind, the contributing teacher’s voices should come through loud and clear. They are speaking directly to you, explaining how a given topic was taught in a Green Light way, sharing the effectiveness of the approach, and in the process offering you ideas on how to mostly effectively teach your own students—so long as you interpret the concepts in the context of your own situation.

Educators Must Act Now!

It’s time to rekindle students’ enthusiasm for learning. The danger is that traditional, lecture-dominated, Red Light teaching promotes boredom, apathy, and disengagement. This undermines the single most important thing we can teach students today: the critical ability to become a lifelong learner so they can thrive in today’s global community.

A Green Light teacher can be someone in any role in education: teacher, teaching assistant, principal, or custodial staff. It can be anyone who is attempting to provide a positive model to students of all ages, the model of someone who, both as a professional and as an individual, is willing to learn, willing to change, and willing to seek ways to improve life in all its various dimensions. The goal of this book is to inspire such educators to become experimenters, explorers, and researchers in their own right, every day in their classrooms. This will create an ever-expanding universe of teaching strategies to replace the Red Light teaching practices that no longer work in today’s classrooms.

I believe that each educator will, over time, develop his or her unique style of teaching. I not only encourage this endeavor, I applaud it loudly and support it with all my heart. If the strategies suggested in this book

are useful in guiding teachers toward this type of ongoing professional development, then the book will have been successful at its most fundamental level.

I hope that, by describing in detail what is being done in some schools, by some very courageous teachers, this book offers educators, faculty, and staff two vital elements to empower Green Light teaching:

1. *the confidence* that these alternative teaching strategies really work; and
2. *the knowledge* of exactly *how* to use the strategies to improve educational outcomes.

In my experience, once teachers are empowered in this way, they and their students achieve truly outstanding results.