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## Why Many Middle School Students Need to Make a U-Turn

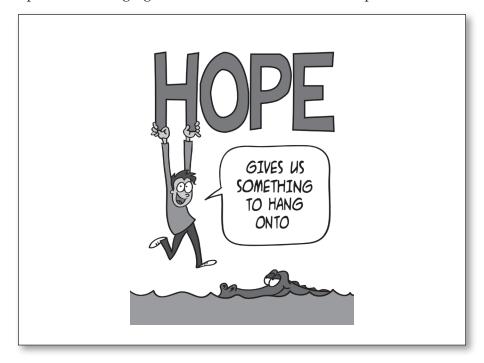
The expressions *middle school* and *middle years* are used fluidly within the educational arena, in some districts starting at Grade 4, in others going up to Grade 9. This book defines the middle years as Grades 5–8, taking a particular focus on the earlier, tricky 'tween years in middle school, when students are aged 9–12.

In education, these middle years mark a critical fork in the road when most students choose their direction in learning. Up until this point, a student's learning behaviors are fluid and can be molded fairly easily. But now these behaviors start to stiffen into unbending rigidity. In elementary school, we build the foundations of learning—the habits, work ethics, attitudes, self-beliefs, and assumptions that determine whether students will be enthusiastic, successful lifelong learners or reluctant underachievers. By the end of the middle years, these foundations may be firmly cemented into in place.

Thus, for us as teachers, the middle years are our last chance to put in place strong, positive learning patterns. If we don't break any negative and potentially destructive learning patterns and assumptions at this stage in a student's educational career, high school is likely to become one long and ultimately fruitless, battle—for

teachers and students alike. Yet the opposite is equally true. If we embed positive, efficient, and effective patterns of learning in the middle years, students are far more likely to succeed in high school and beyond.

This book is called *U-Turn Teaching* because by the time they reach middle school, many students have started down a negative path on their educational journey. Most kids start off in a very positive direction in terms of their early attitudes toward school, learning, their fellow classmates, and teachers. They greet their initial school experiences eagerly, and—in the early days at least—few are disappointed. In their first years of school, students are given enjoyable challenges that they can overcome with relative ease, and they are enthusiastically praised for their successes. They play and work in equal measure, in classrooms full of color, life, friends, and stories. For the vast majority of students, their early educational experiences are positive, upbeat, encouraging, and—best of all—filled with hope.



However, this euphoria doesn't last long. By the time students reach the middle years, the process of learning is changing from curiosity, engagement, and hands on exploration to one of sitting still, listening, and writing. As this change happens, a student's enthusiasm for school and learning drops off rapidly. Exactly when this occurs will vary, depending on the student, the teachers, the curriculum, or even the dictates of the school district. But it almost always

happens, eventually. And when it does, many students start to head down a negative path from which we, as teachers, must help them make a U-turn.

Traditionally, a U-turn is defined as *performing a 180-degree rotation* to reverse the direction of travel.

This is **exactly** what we need middle school students to dobecause by high school, it's often too late to get them back on the road to success. The further students travel down the negative track, the harder it is for them to retrace their steps and recapture positive learning habits. If frustration, humiliation, and failure are the predominant themes in middle school students' lives, they will only become further alienated and less successful in high school. However, if we can steer students into a U-turn and help them regain their initial interest in and enthusiasm for learning during the middle years, these qualities have an excellent chance of continuing to flourish in high school.

Clearly, if we wish to produce successful students, the middle years are pivotal. While the forge is still ablaze, and the iron of student behavior is still malleable, we must strike—and strike hard—to reverse any unhelpful patterns of learning development. So, how do we do that? How do we reengage these students in the learning process, adjust their attitudes, and foster confidence and success?

We need a new approach that deals with the unique developmental phase these students are going through. They are no longer children, but not quite teenagers. They are maturing as people, but definitely not mature. They are not ready for the adult sink-or-swim teaching strategies of high school; yet, they no longer need the intensive support afforded to younger students. This age group needs strong guidance, but enough freedom to think for themselves. Students must learn to take responsibility, while also knowing they are completely supported by their teacher.

To teach this age group appropriately and help struggling students to make a U-turn, middle school teachers clearly require different teaching strategies. Such strategies are the focus of this book: How teachers can help middle school students get back on the path toward successful life-long learning, and how to anchor those behaviors firmly in place, so they will withstand the pressure-cooker environment of high school.

## Making a U-Turn in Your Teaching

For many readers, these new strategies will require educators themselves to make a U-turn in their teaching—to do many things in their

classroom that are 180 degrees different from their current practice. And teachers should welcome this chance because it offers them an opportunity to rekindle their own enthusiasm for and love of teaching.

Just as most students start off their educational careers with positive expectations, most teachers start off their teaching careers bursting with enthusiasm. They are eager for the opportunity to put the strategies they learned in their teacher-training program into practice. They are excited by the chance to make a difference, to affect the future, and to see that glow of excitement on a child's face when he suddenly finds success. They are willing to do whatever it takes to make this happen, so they study hard, learn the *right* ways to teach, and earn their certificate.

And, indeed, they start their first teaching position aiming to always teach in the most effective way possible, to do their best in every moment of every day, and to give every child an equal chance to succeed. However, often within the first few months of their first teaching experience, something unexpected happens. These lofty goals disappear into the swirling vortex of school life. And into this same vortex go all thoughts and considerations about adjusting teaching practices to meet an individual student's needs. Instead, what takes over is a simple need to survive. To do so, new teachers quickly adopt different habits, using practices seen in other classrooms around the school—practices that, from the outside at least, appear to result in *good teaching*.

For example, consider the common idea that middle school students learn best working quietly at their desks. While movement is often accepted as a normal part of the elementary school classroom, by the time students reach the middle years it is often thought they should be perfectly ready to sit and work quietly—and if they aren't ready, then now is the time they should learn how.

From the outside perspective, it's easy to understand why making students work sitting at their desks in silence seems utterly reasonable. Any visitor to this classroom would see a perfect picture of what they remember as ideal learning conditions: students sitting quietly. Clearly, these students are learning something; obviously, these students have a good teacher!

Yet, we now know that for the majority of students, sitting quietly for long stretches of time actively prohibits understanding and recall. Over thirty years of careful research (Hattie, 2009, p. 212) into how the human brain learns has revealed the importance of students moving and talking in the classroom. The teaching practice of making students "work quietly at their desks," while producing an admirable

scene for the casual visitor, does little to support learning, and is likely to produce some very damaging outcomes—for students and teacher alike. Here are five of the many, less-than-positive, results:

- 1. The practice excludes the 35–40% of kinesthetic learners in the classroom who do not learn unless they are moving. These will be the first students to become restless and disruptive, starting a ripple of distraction in the room as the teacher fights to keep these students under control. Most of these disruptive students will not learn the material, and many of the remaining students will become distracted.
- 2. Preventing students from talking reduces the likelihood of them embedding the new material in their long-term memory. Transferring information from our short to our long-term memory requires *processing*. For some students, figuring out the worksheet will be sufficient processing to encode the memory. But for many students, this level of processing only occurs when they talk. Working in silence deprives them of this critical processing step, resulting in them quickly losing all memory of the new material.
- 3. For the students excluded in the previous two outcomes, the experience plants the seed of, or reinforces, a destructive false assumption: *I cannot succeed at learning*. Many of these students are perfectly capable of academic success—if they are taught in an appropriate way that allows them to move or talk. However, if their teacher continues to rely on lecture and silent worksheet activities as the primary mode of information delivery and learning practice, these students will finish middle school firmly established as underachievers in both their and their teachers' minds.
- 4. Because over half the class has failed to adequately learn the material, the teacher must now set aside additional classroom time to reteach the same material.
- 5. The need to discipline students, as well as the need to reteach content that students should already know, is incredibly frustrating for the teacher.

It's easy to see how these damaging outcomes gradually create a viscous downward spiral. The more the classroom becomes a battle-ground, the more irritated and exhausted the teacher becomes. And

there is no way to win. Firmer discipline may result in a quieter class-room—but it will NOT create better results. Teaching stops being a joy and becomes a struggle. Good teachers start to question their calling.

This is when you know it's time to make a U-turn in your teaching practices—for your own sake, as well as for your students—a U-turn that harnesses the science of brain-based learning.

## **Brain-Based Learning**

The phrase *brain-based learning* has been overused—as well as misused—with alarming frequency in the last thirty years. When research on how the brain learns was in its infancy, the term was fairly well restricted to a few key issues that were being carefully studied. Researchers were rightfully cautious about making broad generalizations regarding their discoveries. However, especially in the past decade, the term *brain-based learning* has expanded to encompass an incredibly wide range of educational ideas that are essentially just good, sound, fundamental teaching practices. Understandably, many teachers feel that brain-based learning is a fad that has had its day. Yet, the original science and the wealth of new research expanding the field are extremely sound. We know how the human brain processes and remembers information—and no one is disputing the validity of these discoveries—so we should use these facts to increase success in our classrooms.

This book takes the term back to its original intent:

**Brain-based learning** means what researchers have discovered about how the brain learns best, and how that directly relates to effective classroom learning.

All the ideas and strategies in this book are based on what we now know about how the brain processes and remembers information.

Yet, while we cite this research at various points through this book, it is not a comprehensive overview of research about the human brain. Instead, we have a singular focus: to translate what has been discovered in the area of brain research into practical, doable classroom strategies. While the research provides a wonderful starting point for understanding how educators can most effectively reach students, it is only that—a starting point. We still have to translate these wonderful insights into how people learn into workable, daily teaching practices.

## **Guiding Insights**

Here are the *guiding insights* from brain-based research that form the threads of the tapestry that underlies all of the strategies and techniques offered throughout this book—the first two will be familiar! These insights are stated in a less technical way than some researchers might prefer, but since this is a book about practical application, let us start by stating them the language of the classroom.

Insight	Why It's Important	What It Means to You
Movement is vital (Van Praag, Kempermann, & Gage, 1999, pp. 266–270)	Movement increases blood flow, which increases oxygen levels in the brain—leading to better focus, attention, and engagement.	At all times, find reasons for your students to move.
Student conversations enhance learning	Talking is one of the most powerful means of processing new information.	Let students process information with their peers whenever possible.
Experiential learning works (Sousa & Tomlinson, 2011, p. 14)	Total engagement— mental, physical, and emotional—directly leads to higher levels of learning and recall.	Whenever possible, include an experiential component in your lessons.
Memory strategies are important	Most students need a specific recall method to retrieve a memory.	When introducing new information, build in a moment when you explicitly tell your students: <i>Here's how we will remember this</i> .
Redundant retrieval routes boost recall	When students have <i>more</i> than one way to remember key information, they find it easier to remember.	Try to create audio, visual, kinesthetic, and emotional memories of new content.
Positive emotions support learning (Sousa & Tomlinson, 2011, p. 20)	Students learn best when they are happy. Fear, anger, and stress literally shut down our ability to learn.	Proactively seek to create anticipation, curiosity, excitement, joy, and laughter.

To any experienced teacher, few of these guiding insights will be stunning revelations. When you think back on your most successful lessons, you will probably see quite a few of these strategies woven through those experiences—whether you included them consciously or not.

The bottom line is that these ideas are important—they matter—and we need to be conscious of them to ensure we are on the right path. To design effective, dynamic lessons, and understand how to run the middle school classroom efficiently and competently, we must keep coming back to these guiding insights.

Clearly, this is not an exhaustive list. We have cherry-picked from a wealth of findings to give you what we believe are the most salient research-based insights into learning. For our purposes, we wanted the list to be precise, concise, and manageable. The ones we included are the largest, most broadly important factors in the strategies shown throughout this book.

Some readers may point out, correctly, that research also shows that the absolute fastest way to teach someone something is through pain-aversion (Johansen, Fields, & Manning, 2001). This is why most people only need to touch a hot stove once to learn not to touch it again! And why military training—where a person's ability to stay alive can depend on how fast they learn—is often extremely brutal.

However, given the overarching goal of our education system is to create lifelong learners, this approach is not appropriate in the classroom. Pain-aversion learning brings with it a host of negative, wide-ranging reactions and responses that would quickly spread to all areas of classroom learning—something we dearly want to avoid.

This is why the starting point for U-Turn teaching is to create a positive learning environment. A well thought out and carefully run classroom, full of laughter, noise, and fun, creates a host of connected *positive* reactions and responses that we can leverage to help our students succeed.

To achieve this, you don't have to make every guiding insight a part of every moment of every lesson. Such a lesson would be impractical to design, and impossible to conduct in the classroom. These guiding insights are not *must haves*, but frequently recurring and intertwining themes—rarely does one operate solely on its own.

If you are interested in finding out about more of the research behind each of these guiding insights, we have provided a few citations to get you started. You'll soon discover an enormous amount of brain-based research behind each of these ideas. Right now, it's time to start discovering how we can put these insights, from all the wonderful brain-based research, to use in our classrooms.

## **Teaching With Intention**

First and foremost: Stay aware of the guiding insights. Deliberately take these facts about how the human brain processes information and see what they mean to your teaching practices. Examine what's happening in your classroom through the lens of the insights. You might start to see apparently bad behavior in a different light (Boynton & Boynton, 2005, p. 5). Students rarely act out because they are *bad*—they act out because they are uncomfortable and disengaged. Stop saying *no* and starting asking *why?* 

Next, look at the following four principles which are the primary focus of this book. They are designed to focus you on how to intentionally put brain research (Hattie, 2009, p. 119) to use in your middle school classroom:

- **1. Build and maintain trust**—If they are to achieve academic success, students must first feel safe in their environment.
- **2. Create a collaborative community**—Harness the power of collaboration to improve learning outcomes; encourage acceptance and tolerance, and instill personal responsibility.
- **3. Take a TEAMing approach**—Working together improves emotional safety and enables students to better process information (Frey, Fisher, & Everlove, 2009, p. 58).
- **4. Prime the positive environment**—The easiest way to maintain discipline is to reinforce and reward good behavior.

This book devotes the next four chapters to each of these principles, covering the theory behind them and providing a range of practical strategies for embedding them into the fabric of your classroom.

Please know that these strategies have been tested in both self-contained and departmentalized classrooms—and in all middle school grade levels. For simplicity, they are often described in a self-contained context, with notes on how to adapt for departmentalized teaching. They are also typically described for use in the early middle school classrooms (Grades 5 and 6), because this is where students need the most coaching and modeling. You can easily adapt them for more mature students by omitting any steps that seem too elementary. The key is to understand the intent behind the strategy, and then to implement it in a way that will work with *your* students in *your* classroom.

Much like the guiding insights, the four principles depend on each other, and overlap in various places. Therefore, here is a very brief introduction to each one, so you'll be aware of the interplay between them, regardless of which chapter you read first.

#### **Build and Maintain Trust**

Trust is among the most important values in any relationship, and the teacher-student relationship is no exception. Yet in a classroom, the issue is magnified since student-to-student relationships must also be maintained on a trusting level. Indeed, the fact that so many student-to-student and teacher-student relationships must be simultaneously managed to develop a trusting environment makes this an enormously powerful—and vitally critical—part of any successful middle school classroom. Of even more importance, the middle years are the development stage in which students first truly experience their sense of self-worth and its relationship to their peers. Sustaining trust under these circumstances requires clearly established rituals and routines to build trust at all levels. This chapter not only outlines these important rituals and routines, but also shows how they are used in practical situations. You'll find ways to vary the rituals so they remain fresh and interesting, a number of new and imaginative places where trust can be further developed, far beyond what's normally expected in a traditional classroom.

## Create a Collaborative Community

When students work in collaboration with each other, it often leads rapidly to a higher level of understanding and insight than would be possible if the teacher were merely explaining new concepts. Often, a student struggling to make sense of an idea may understand it better when it is explained by a peer (who only recently figured it out herself) rather than by an adult. Collaborative learning succeeds at multiple levels, with students often feeling they are not having to learn in the traditional sense. In addition, students who work in cooperative groups learn to respect and value each other's different strengths, styles, and needs. This chapter looks at how to physically change the set-up of the room to enhance collaborative moments, as well as explaining a variety of collaborative learning activities. Using these classroom set-ups and activities results in middle school students learning to work together, respect each other, and build a dynamic community of learners.

### Take a TEAMing Approach

Evidence suggests that teams create a supportive network, lowering blood pressure, improving immune systems, and driving attention. Teams provide a predictable transition between the students' world and the academic world, keeping stress levels low and eliminating threat responses. In addition, teams create a feeling of confidence, a sense of accomplishment and success, driving students to learn more, without extra effort by the teacher. And of course, teams can create the feeling of belonging, releasing positive brain chemicals such as serotonin, which make students calmer and happier (Wolk, 2008, p. 10). Yet while the success of the teaming approach is rapidly gaining credibility in educational arenas, we need to know how to realistically make it work in a practical way in the classroom. This chapter offers a variety of concrete ways in which to establish, organize, and manage teams of middle school students. It brings to life the theoretical concept of teaming in the classroom, in a down-to-earth, realistic, highly practical way.

#### Prime the Positive Environment

This book advocates many teaching strategies that appear to threaten classroom discipline. For example, it positively encourages you to let your students move around, talk, laugh, and have fun. This chapter shows you how to allow all of these potentially chaotic activities, while still maintaining discipline, using a powerful self-reward system to reinforce good behavior. It is based on the proven premise that, by proactively demonstrating, facilitating, and motivating positive behavior, you can dramatically reduce the number of times you have to discipline your students. You'll also find strategies for handling occasional inappropriate behavior in a way that (1) does not embarrass the particular student, (2) does not unconsciously encourage the behavior in other students, (3) creates a positive outcome for the entire class, and (4) reduces the chances that those behaviors will occur in the future.

Once these four principles have been clearly explained and demonstrated through practical activities, the next section addresses how to bring together the various and sundry pieces into a complete package—a lesson that rocks. Lessons that truly work for middle school students, and classrooms that truly work for the students and the teacher, are the eventual aim of everything offered in the book.

#### The U-Turn Is Vital

For many middle school students, the frightening truth is that it's not just time for a U-turn in their attitudes toward learning—it's their last chance. By the time they reach high school, their lives will be filled with content-specific schoolwork to complete, athletic opportunities to seize, social demands to be met, and much, much more. If they are not on the right path, with the proper attitude toward learning, when they depart middle school, it may well be too late. For there's a strong chance that no one will ever focus as closely on them as an individual again, and they will be lost forever in the greater shuffle of high school life.

As a middle school teacher, you have a chance to, literally, change lives. By using the ideas and strategies in this book, you can help middle school students to make a U-turn on their educational paths, opening up a world of possibilities. And, in the process, you may also find yourself making a U-turn back to your original love of teaching. Because knowing how to open those doors of possibilities for your students—putting them on a positive path to better and more successful lives—is really the most that any teacher, at any level, could ever ask for.

Let the U-Turn begin right now.