There is not another set of professionals that we respect and appreciate more than educators. Beyond a few other civil servants such as police officers and our military, there are few professionals who work as hard as educators, provide such an essential service to society, and receive so little in compensation and gratitude. It takes an amazing individual to become and remain an outstanding educator. It takes even more sacrifice and commitment to become and remain an educational and instructional leader. Thank you for all that you do! We hope the information we provide in this book can help you in many ways to support your efforts and increase your effectiveness.

We (the authors) are former K–12 educators and administrators. We are now professors of educational psychology, research, and leadership, and we know through practice and research that many factors impact and embody a student’s ability to achieve academically as well as socially and ethically. The current education system, however, relies heavily on a few numbers (e.g., standardized achievement scores) to measure academic achievement. Research and common sense suggest that these numbers rarely ever accurately highlight the array of admirable efforts put forth by educators that benefit students. We believe that looking at isolated test scores can only provide a minimal understanding of the many possible reasons for the students’ levels of achievement. High achievement is a worthy goal, but knowing how best to improve achievement is even better. Schools are complex organizations, and to understand them more completely, meaningful and useful data must be captured and connected from more than one source and on more than one variable. This is the basic logic behind Multi-Dimensional Education.

We see the education provided within schools as a system that has many parts. It is the sum of these parts that create the synergy needed to help students and teachers succeed. Some of these parts you have more control over than others. Some of these parts (e.g., finance) you might have no control over. But remember, it is the sum of the parts
that create the synergy needed to generate the energy to improve. And if we can more accurately monitor the functionality of the more meaningful parts and more closely assess the impact they are having, the better chance we have to offset the possible negative impact. We do this by having you focus on seven dimensions of education that have been linked to highly effective schools by more than 40 years of research. The Multi-Dimensional Education approach provides you with a more comprehensive understanding of the systemic efforts of your school. By adapting your school improvement efforts to use these seven dimensions of data to address and improve your school’s curriculum, community, climate, and character (what we refer to as the 4Cs), your efforts can result in greater academic success for students and career satisfaction for educators.

A Framework for Data-Informed Success

If you believe that accountability and data-driven decision making need to be based upon much more than student achievement test scores, then you will find this book of interest. If you want to collect a body of evidence in your school that can help you actually identify what needs to be addressed in order to increase both achievement test scores and other measures of success such as graduation rates and retention of highly effective teachers, then the Multi-Dimensional Education process this book explains will be of even more interest. This book provides educational leaders at the school level with a framework for collecting, organizing, and utilizing seven dimensions of data to truly drive improvement efforts in the right direction. As the research, practices, and strategies we will share with you show, there are seven dimensions of data that can help you become more successful at using data to drive school improvement and turn around persistently low-performing schools.

As you will see, these dimensions are not new. You have thought about them and discussed them before. Many of you, however, may not have considered assessing the seven dimensions or organizing existing data under them. And despite decades of research showing how success is reliant upon these seven dimensions, most educators have not connected the evidence from each dimension to guide achievement. As we emphasize throughout the book, it is not about measuring whether you are the best or most proficient school. It is not about measuring how far you are from becoming the best. It is about measuring what you need to know and fix in order to be the best.
Whether you like the term or not, the bottom line is that educators are now expected to be data-driven. Regardless of whether you would rather call it data-aware or data-informed, unfortunately for many this expectation for using data often does not come with an adequate amount of meaningful data to consider and the guidance needed to actually use such data to steer school improvement efforts. In order to bring about successful and, more importantly, long-lasting improvements in academic achievement, decreases in academic challenges, and higher levels of teacher effectiveness, educators need greater support in developing a framework to make data-driven decisions. This book will provide you with the support, examples, and framework needed to do it right.

By organizing your school’s data under the seven dimensions most often associated with highly effective schools and applying this data to improve the 4Cs of education, Multi-Dimensional Education (MDed) can help you develop a more robust and fair growth model that your educators can use to assess, improve, and achieve. Instead of focusing on a systematic approach to education like other books that have you focus on improving a certain area or using achievement
scores to improve achievement scores, Multi-Dimensional Education provides you with a more holistic systemic approach for connecting the data-driven pieces needed to solve the accountability conundrum.

**Why Did We Write This Book?**

To answer this question simply: Whether others want to admit it or not, we believe that a number of parts of our education system are broken. The way we assess our success and base such success on achievement score proficiency is short-sighted, to say the least. Many schools are not reaching their full potential; we must develop a better system to fix the flaws. If a strict focus on improving the curriculum, raising the standards, and fixing the achievement tests has not helped to significantly raise our test scores, improve our international rankings, recruit and retain more qualified teachers, and graduate a higher percentage of well-prepared students, then common sense would tell us that the system is still in great need of repair. There is an abundance of qualitative and quantitative evidence that needs to be added to our data-driven efforts. Why did we write this book? Because when it comes to education, and more importantly to data-driven education, it would appear that common sense is not that common anymore.

In the United States, more than a third of new teachers leave the profession within 3 years of entering it. Every 5 years, half of them must be replaced (National Commission on Teaching and America’s Future, 2008). Canada is experiencing a similar problem, with 27% of new teachers leaving within 3 years (Government of Ontario, 2005). Additionally, a great number of our most experienced teachers are taking early retirement or leaving to pursue work in another field. Many of these once-inspired educators are leaving because they feel under-supported, unappreciated, and underpaid. They also report concern with student behavior problems. A 2008 study showed that the cost of per teacher turnover ranges from $4,000 in rural districts to $17,000 in large urban districts (National Commission on Teaching and America’s Future, 2008). This trend of losing educators is unfortunate; to correct it we must get beyond a strict focus on using student achievement scores as our indicator of success. We must also focus on better assessing how to support and better prepare our teachers.

Meanwhile, as the exodus of educators progresses, every 9 seconds in America a student becomes a dropout (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004). It’s sad but true that only about two thirds of all students nationally who enter ninth grade will graduate with
regular high school diplomas four years later (Orfield, 2004; Swanson, 2004). Our education system is producing millions of young people who are degreeless and ill-equipped to compete in today’s workforce and economy. In the 2006 High School Survey of Student Engagement, 24% of students who have considered dropping out of high school reported that “No adults in the school care about me” (Yazzie-Mintz, 2007, p. 5). That means that in a class of 20 students about 5 feel this way. Additionally, 73% didn’t like school, 61% didn’t like the teachers, and 60% did not see value in the work they were being asked to do. One significant reason students drop out of school is that they lose interest and motivation because the curriculum does not seem to have a real-world application. A 2006 poll by Peter D. Hart Research Associates, Inc., of California ninth and tenth graders considered at risk found that 6 in 10 respondents were not motivated to succeed in school (Bridgeland, Dilulio, & Burke Morison, 2006). Of those students, more than 90% said they would be more engaged in their education if classes helped them acquire skills and knowledge relevant to future careers. But it is not just the potential dropouts that are expressing concern. According to the Survey of Student Engagement, 50% of all students report being bored every day, while 58% report that the reason they come to school is because it is the law (Yazzie-Mintz, 2007).

These are not good signs for the future success of education. Common sense would suggest that a broader focus on developing the whole child, a focus that gets beyond preparing for a test that students see as somewhat meaningless to graduating or preparing for adult life might result in increasing motivation and positive feelings toward school. If research shows that motivation and feelings toward school consistently account for 20% of the reason a student does well or does not do well, then common sense would tell us that if we increase motivation and positive feelings toward school we increase achievement. It’s not just about increasing a student’s content knowledge or ability to think critically. We must find better ways to energize our students, educators, and parents to become a part of something different and more positive. The fact is that achievement scores do not help us measure the true success or failure of teachers or school leadership (Baker et al., 2010). We would also venture to say that achievement scores rarely measure all that a student has gained from teachers. As many learned in their classroom assessment courses, the way teachers assess students’ learning influences what and how the students actually learn in the classroom. This same concept applies to how we assess schools. The way we assess school performance influences performance. Because an
abundance of data supports these facts, it is rarely argued that we
can’t do a better job of educating our future citizens and workforce
or developing and retaining more highly qualified teachers. The
Multi-Dimensional Education system this book will share with you
holds great promise for educators to accomplish such redirection in
schools. We write this book to help you use a Multi-Dimensional Education
focus to assess and identify how you can better support and nurture better
students and educators.

Who Did We Write This Book For?

If you are still reading this preface, there is a good chance that this
book will be of interest to you. If the title was of interest, then the
contents will provide many moments of reflection and strategies for
change. But mainly, we write this book for individuals who share the
responsibility for the leadership of a school. To us, leadership is para-
mount to success in schools. Leadership can either kindle or kill inno-
vation and improvement. Leadership can support or sink success and
achievement of all educational stakeholders.

To us, leadership extends from the classroom to the district
administrators. We state it this way because too often leadership
flows mainly in one direction: from the district office down to the
classroom. When it comes to the data-driven side of education, too
often school-level administrators and teachers are told what scores or
statistics they will be responsible for rather than being provided with
the scores and statistics they need to improve the areas they are
responsible for. If you have ever tried to lose weight, you know that
getting on the scale every morning and staring at the number will not
help that number improve. No matter how much we wish we might
lose weight, it does not happen until we actually do something. We
could just adjust the scale so that it appears we lost weight, but that
would not accomplish the goal. You could also change your diet. And
for some this will help. But though it might help you drop your
weight, it might not help improve your health, cardiovascular fitness,
or muscular definition. Most of us who are trying to become healthier
have to change our diets and our daily routines. We often have to add
different activities and exercise to our schedules. We often need to
eliminate unhealthy practices, because a change in our being is fre-
quently dependent upon changing what we are doing.

We write this book for the shared leadership teams in schools who
are growing frustrated with focusing on achievement and proficiency
scores. We write this book for the educators who continue to wish
(and pray) that their scores improve. We write this book for the educational leaders who have embraced a new curriculum “diet” that helped to improve things a little but did not get them to where they want to be. We write this book to provide educators with an exercise regimen that forces them to focus on improving four areas (curriculum, community, climate, and character) essential to healthy schools. And to help you improve in the 4Cs, we encourage you to focus on seven dimensions that historically have been associated with highly effective and excellent schools. We write this book for shared leadership teams that are looking for guidance on identifying data they need to improve the success and satisfaction of students, parents, and educators.

What Makes This Book Special?

While other books might try to get you to focus systematically on one thing or the other, this book is intended to help you look at the big picture and embrace a systemic approach to school improvement. This text provides you with a new lens for seeing how school-level and stakeholder data can be collected to help you reach your true potential for increasing achievement by directing your data-driven thinking toward qualitative and quantitative assessment of dimensions such as Leadership Potential, Faculty Fidelity, and School Climate. These are just three of the dimensions of the Multi-Dimensional Education system we will share. The strategies and tools this book provides are meant to help you be successful in an outcome based accountability system by using a more comprehensive collection of process and formative data to guide your way. Seeing how a wide variety of data types fall into the seven dimensions can concentrate your focus and complement and guide what you do. This text challenges you as an educational or instructional leader to further apply educational research, theory, and measurement to educational practice, and helps you to better handle the school leadership and differentiated instructional challenges that arise in today’s schools and classrooms.

What Is This Book’s Purpose?

The purpose of this book is to give you the framework you need to make meaningful and lasting systemic change. Too many books and professional development efforts take what we refer to as the “triage approach.” They urge you to focus on one area, one subject, or one problem in hopes that by fixing this one thing everything else will
improve. And though such approaches might provide temporary relief, they rarely if ever bring about lasting change or significant gains. No matter how well teachers teach in a school and make their classrooms wonderful learning environments, if the school climate is leaving the students, parents, and educators feeling unsafe, unsupported, and unwanted, it will negate much of the teachers’ efforts. No matter how hard school leaders try to get parents more involved with the school or their child’s academics, if the teachers are not willing to buy in to the effort, it will rarely if ever make a significant sustained impact. The purpose of this book is to provide you with research, success stories, practices, and strategies showing why we must get all parts of the seven-dimensional system working together and utilize the 4Cs to increase achievement, and how to do so.

We do this by focusing in Part I on providing the research supportive of a seven-dimensional assessment approach (the rationale) and explaining the framework you need to put these seven dimensions to work in your school. In Part II, we turn the focus to improvement and explain how the seven dimensions of data can lead to improvement in curriculum (delivery), community, climate, and character. In Part III, we come back to how the Multi-Dimensional Education process can help you increase achievement. We show how seven dimensions of data applied to improving the 4Cs of practice can help you better focus on achievement while also improving many other indicators of your success and satisfaction when you adopt a multi-dimensional common sense approach to data-driven thinking.