

111S Learn Differently

A Guide for Teachers and Parents

MICHAEL GURIAN with KATHY STEVENS

Boys and Girls Learn Differently!

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Boys and Girls Learn Differently!

A GUIDE FOR TEACHERS AND PARENTS REVISED 10TH ANNIVERSARY EDITION

Michael Gurian with Kathy Stevens, Patricia Henley, and Terry Trueman



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To Gail, Gabrielle, and Davita Gurian

To all the boys and girls in preschool through twelfth grade, and to Bob Henley

To Patty Nasburg and Jesse Trueman

And to the students to have kept us young and interested and truly involved in learning and teaching

To Kevin and Mike Roe

To the parents and teachers who are working hard to give their sons and daughters every chance to have successful lives

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INTRODUCTION

Welcome to the tenth-anniversary edition of *Boys and Girls Learn Differently!* We hope you will delve deeply into this book, and use it to assess whether your schools, families, and communities are creating environments in which both boys and girls have the opportunity to be successful and develop a life-long love of learning.

A lot has happened in the ten years since the book's initial publication. The premise exclaimed in the book's title—that boys and girls learn differently—has now become generally accepted as reality, based on research that increasingly supports the existence of discrete differences between the brains of males and females. The Gurian Institute is proud to be among the first organizations to apply this gender science on a large scale to the education of children. Our initial goal was to help both educators and parents translate the brain-based theory of gender difference into daily strategies to assist teachers and parents in helping children grow, learn, and succeed in school and life.

Now, ten years later, schools and districts around the world are receiving training in how boys and girls learn differently and altering learning environments to respond to the needs of each child. They are thus helping both boys and girls understand themselves and their own learning abilities in depth. The Gurian Institute has gone forward from the initial pilot study reported in this book's original edition to train more than fifty thousand teachers in more than two thousand schools and districts. Other individuals and agencies have developed programs to provide training in how boys and girls learn differently as well, and our efforts join these in extending training worldwide.

Writing this in 2010, I can see the development of a social movement over the last decade, one based in grassroots parental and educational passion united with science-based theory and practice a movement that has spread into academics, publishing, and the media. If you Google "gender differences" or "boys and girls learn differently," I think you'll see the same thing. There is a vast new array of research and commentary that was not heretofore available.

Between ten and twenty years ago, when I was doing the initial research for this book, it was nearly impossible to get attention for (1) boys' issues in school, and (2) how boys and girls learn differently, except in the context of tragic school shootings, all of which were perpetrated by boys. In this last decade, however, boys' issues in school are growing in cultural interest, and the science of male-female brain difference is being reported constantly. A powerful nexus of social change in gender studies has been building, one in which girls' and boys' issues can be dealt with concurrently. It is wonderful to see our culture developing its new gender dialogue with the ability, sense of urgency, and elegant science available to help both girls and boys equally.

Who We Are and What We Do

As lead author of the both the first edition and this new edition, I want to provide you with information about how to use this book, thank my coauthors of the original edition, and introduce you to Kathy Stevens, the coauthor of this new edition.

The initial edition of this book was coauthored with former school superintendent Patricia Henley, who contacted me about creating a "Gurian Institute Pilot Program" through her directorship of the Missouri Center for Safe Schools. We were later joined by Terry Trueman, a therapist specializing in adolescent issues, who won a Prinz Honor Award for his young adult novel, *Stuck in Neutral*. Patricia formed a research team to bring to the public my initial gender/brain-based child development theory (first published in *The Wonder of Boys*) via practical applications in schools. We hoped to understand more deeply the applicability of male-female brain difference theory in the lives of children and students themselves. We did not have available to us a decade of corroborating research because the theory itself was new and had not been substantially tested. The six-school district pilot program that Patricia set up in Missouri was the initial test.

As you'll see from the research and strategies in this book, that pilot was successful. Over a two-year period, through Patricia's guidance of the Missouri pilot, we proved both the initial guiding theory (that boys and girls learn differently, for reasons of both nature and nurture) and its initial applications theory (that if teachers are trained in malefemale brain difference they will innovate successfully to raise student achievement, close achievement gaps, and lower discipline referrals). In our pilot programs, teacher effectiveness and student achievement increased while discipline referrals and behavioral problems decreased.

When the two-year pilot study concluded, the Gurian Institute's collaboration with the Missouri districts, Patricia Henley, and Terry Trueman was completed, but it was clear that the success that teachers and families were having was substantial. My publisher, Jossey-Bass/John Wiley and I asked Dr. Henley and Mr. Trueman to join us in publishing *Boys and Girls Learn Differently!* We wanted to provide, in written form for teachers and parents, the theoretical and practical research-based strategies that we had gathered.

The initial edition of the book came out in 2001, and was well received. Most important, it was well used! Teachers and parents formed study groups, schools asked for experiential professional development, school districts began to look toward systemic change, and, across the country, educators and parents innovated. This successful "usability" began to make the theories and practical tools in the book a more widespread phenomenon. I am grateful to Patricia Henley, her University of Missouri-Kansas City staff and colleagues, and Terry Trueman, for all their work in providing the initial energy and acumen for this phenomenon.

4 Introduction

Just after the publication of *Boys and Girls Learn Differently*! I met Kathy Stevens. Kathy is an educator and worked for two decades in both education and the nonprofit sector designing, implementing, and directing programs related to early childhood, youth and adult corrections, diversity, and issues affecting women and girls. Also, she is the mother of two sons, both of whom struggled through school. Her youngest son had an especially difficult time conforming to the traditional institutional classroom.

In Kathy, I found an educator who was passionate about helping schools and families understand how to create boy- and girl-friendly environments at home and in school. Kathy and I began to collaborate, and she gradually helped form the new Gurian Institute (www. gurianinstitute.com). Now the executive director of the Institute, Kathy guides professional development for educators and training programs for parents which are being delivered across the United States and in many international locations. Working with the Gurian Institute training corps—now more than seventy certified trainers in the United States, Canada, Qatar, Shanghai, South Korea, Australia, and France— Kathy shepherds work with schools, parents, and youth organizations to help them implement systemic change. In her words, "This work isn't giving schools and families yet another thing to do, but giving them a new way to make the important things they are already doing most effective."

Kathy and I are joined in this work by Associate Director Kelley King and our staff and trainers. This new Gurian Institute has taken the initial theory about boys and girls learning differently into a larger field. This expansion has occurred both in schools and districts and in publications and books. Kathy has cowritten *The Minds of Boys: Saving Our Sons from Falling Behind in School and Life*. Kathy, Kelley, and I have cowritten *Strategies for Teaching Boys and Girls: Elementary and Secondary Level*; and Kathy, Peggy Daniels (a Gurian Institute Master Trainer), and I have cowritten *Successful Single-Sex Classrooms*.

Each of these publications—part of our Institute's collaboration and partnership with Jossey-Bass/John Wiley—is aimed toward filling in new pieces of the educational puzzle as we discover them in our training, consulting, and professional development work. In these books as well as this new edition of *Boys and Girls Learn Differently!* you will see anecdotes, stories, and strategies from teachers, principals, parents, and other professionals just like you. In this work, there is definitely a feeling that we are all in this journey together.

How to Use This New Edition

As you read this new edition, you will find both the best of the initial pilot study, and many new pieces of the educational puzzle. For this edition, Kathy has joined me in revising the initial book to include:

- I. A new study guide for teachers.
- 2. A new study guide for parents.
- 3. New success data, both quantitative and qualitative, from schools and school districts in which we've worked since the initial study (these follow in this Introduction and also appear in various chapters of the book).
- 4. Updated brain research information, mainly in Chapters One and Two.
- 5. Updated Notes and References, including new books, studies, and research in the Notes section at the end of the book.
- 6. Changes to the original text to corroborate updated scientific and in-the-field findings over the last decade.

As you read this book, please feel free to move between chapters and study guides in order to augment your learning and application of the work. In the various chapters, you may meet some teachers, principals, and professionals who have moved from their initial schools, changed jobs, or passed away. No matter where they are now, if their innovations have been corroborated by other schools and professionals in the last decade, we have left them in this edition.

If you are a student of brain science, you may notice something Kathy and I noticed as we prepared this new edition. Although we have added new science and brain facts as we've learned them over the last decade, still, nearly all of this book's brain science—garnered over ten years ago—is still applicable or has been corroborated further and increased in applicability. Since the original publication, we've learned of over a hundred structural and functional differences in male and female brains that affect learning and behavior. We've also learned about chromosome markers (genetic material) that affect both genderbrain organization in utero (before our boys and girls are born) and brain activation over the twenty or more years of childhood and adolescence. Both genetics and brain activation are crucial to boys' and girls' learning, and just as important as nurture and culture. Our scientific knowledge has increased in the last ten years, but the initial gender science findings of the 1980s and 90s, reported in our initial edition and applied by the teachers and parents in Missouri and elsewhere, have stood up to a decade of scrutiny.

Because of the strength of both the initial science and the initial school strategies, Kathy and I have not altered what did not need to be altered. The original work still shines through in this edition. We have, however, made changes where we felt they were necessary, both to catch up to new science, update Web sites and references where possible, and add new success data and new strategies where needed.

Both in leaving things alone and in updating, we have tried not to repeat our work in the books listed earlier in this Introduction. Thus, as you read this book, please know that pieces of the puzzle you might find missing in this book may well be filled in through our other publications.

Success Stories Since the Missouri Pilot

Our publications since the first edition of this book, as well as this tenth-anniversary edition, grow from success that schools have had in creating what we call "the ultimate classroom" for both boys and girls. Successes during the initial pilot program in Missouri included raised grades, better test scores, and lowered discipline referrals. You'll read about some of these in this new edition. Since then, success rates in other schools and districts have grown. Although educational systems are dynamic—and thus, some schools in this book have seen changes in personnel and programming—new success stories have emerged around the country. Douglass Elementary School, in Boulder, Colorado, is one example.

In August 2004, the faculty of Douglass studied their achievement data and noted a gap in achievement between boys and girls in reading and writing. The faculty, led by principal Kelley King (now associate director of the Gurian Institute), decided to establish a school improvement goal to close the gap through the implementation of instructional strategies shown to be effective in accommodating the brain differences of boys and girls. The teachers and principal used the original edition of *Boys and Girls Learn Differently!* as a book study and received professional development in strategies for teaching boys and girls.

After one year, Douglass closed its gender literacy gap, and saw other improvements in academic areas, including special education. Douglass was later featured in a cover story in *Newsweek* on boys' issues in school, and on the *Today Show*. Douglass Elementary provides a powerful example of how school success can reach into the larger culture to help educate not just the students and families in Boulder about what boys and girls need, but other communities, schools, and families around the world.

Similar success occurred at the school district level in Minnesota. When the Edina School District in Minneapolis, Minnesota, decided to work on gaining greater knowledge and training on how boys and girls learn differently, they used our book as one of their resources. Dr. Ken Dragseth, the superintendent, contracted with the Gurian Institute staff to facilitate professional development in issues facing boys and girls, including practical applications of instructional strategies that focus on gender differences. Over a three-year period, Edina Public Schools saw qualitative and quantitative improvement in student performance. Dr. Dragseth credits gender-friendly instructional theory and techniques with helping Edina to significantly improve student achievement and to meet the individual needs of both genders. He reported to us that when compared with their surrounding districts, Edina's seventh- and tenth-grade Minnesota Comprehensive Assessment Reading and Math mean scores were higher for both boys and girls. The district also noticed the gap between boys and girls beginning to close. Additionally, the district found that teachers' and parents' heightened awareness of gender differences in learning styles and appropriate strategies was well received by students themselves.

For more success stories over the last decade, you can go to www.gurianinstitute.com/success.

Innovating with Single-Sex Options

A fascinating and fruitful area of success that has developed over the last decade is the single-sex option. In the first edition of this book, the Missouri pilot program utilized single-sex options, especially in middle school. Since that time, the movement has been growing. In 2008, Title IX rules were changed by the Bush administration to include more school freedom to try single-sex options. Over the last decade, nationwide and internationally, a continued increase in the boy-girl literacy gap has caused schools to consider separating boys and girls in reading and writing classes. Likewise, the goal of helping girls be more successful in math, science, and technology has led to more girls-only classes in these subjects in both public and private schools.

These gaps are exacerbated in some urban communities. In 2007, the Atlanta Public Schools contacted Kathy and our team about providing an intensive professional development program for two new schools—the Coretta Scott King Young Women's Leadership Academy and the B.E.S.T. Academy at Ben Carson. Both schools opened with sixth-grade single-sex classes and plan to expand one grade each year until they include grades 6–12. Faculty, administrators, and parents participated in training and professional development for three years. Kathy led our team in delivering training, observing classrooms, providing one-on-one teacher mentoring, designing a gender-specific advisory program, and working with parents to help both schools create and sustain boy- and girl-friendly classrooms.

We are thrilled to report that both the boys' and girls' academies achieved "adequate yearly progress" in year two, and both schools are now Gurian Institute Model Schools. You can learn more about their success, and the success of other single-sex programs at www. gurianinstitute.com/Success. We will also feature other schools throughout this new edition.

Moving Forward at the Nexus of Science and Practice

The issue of success is a crucial one. Especially in this new decade, as our culture works hard to build good schools on successful curricula and programming, it is important to be able to say something we couldn't yet say when the original edition of this book was published: that the initial two-year pilot's success has now been corroborated by schools and districts around the world.

When you and I and anyone reading this book were in graduate school, or in teacher certification programs, or in whatever system in which we initially learned to teach and to parent, we approached kids on the premise that each student is an individual. This was good learning, and to a great extent it makes us the good teachers and caregivers that we are today. But it lacked a component that we sorely miss the longer we actually teach in the classroom or raise kids: it lacked sensitivity and clarity about what individual *girls* need and what individual *boys* need—the most fundamental form of differentiation within us and our children was, for too long, ignored.

Helping professionals and parents understand their boys and girls, and then going even further—to help them learn practical strategies and systemic changes that successfully teach children—is now an important part of the social conversation. Although there is immense overlap between male and female brains, there are also many distinct differences in learning needs, and inclusion of these differences in teacher and parent training is a crucial part of creating educational systems that work well.

Ultimately, my team and I hope you will read this book from this perspective of importance. The work you are doing for boys and girls work we hope you'll find supported and corroborated in this book—is being done at a crucial nexus of science and practice. You are thus involved not only in the work of helping individual boys and girls, but also in furthering our civilization's dialogue regarding such key themes as "What is a good school?" "How can science help education?" "What is an effective teacher?" and "What do our students need?" Along with everyone you meet in this book, you are involved in a practical response to the greater call of humanity, one inherent in teaching and parenting: the call to help our children become the men and women we need them to be as they grow up and seek to serve their families, communities, and civilization.

September 2010

Michael Gurian Spokane, Washington