

A User's Guide to Books from the Gurian Institute

Remember when you were a brand-new teacher? After four or five years of college preparation, including an exciting semester of student teaching, you finally found yourself standing in front of sea of beautiful faces gazing up at you: your class! As you looked at the children, you imagined all the things they would know by the end of that school year, all the things that they would learn with your help—all the things you would teach them.

Your years of preparation no doubt taught you that each of your students would have an individual learning style, so you learned to use a variety of teaching strategies to engage the diversity of your students. Odds are you actually enrolled in one or more specific classes dealing with “differentiated instruction” and how to implement differentiation in your classroom. Differentiated instruction is based on the belief that students differ in their learning profiles and that differentiated classrooms are more natural and effective than those in which students are served a one-size-fits-all style of learning.

The odds are also that you did not have even one semester-long class that focused on the most fundamental type of differentiation that exists in 99 percent of classrooms in the United States, both public and private—boy and girl learners. They are “differentiated” by gender, and research over the last two decades has made it clear that “boys and girls learn differently!”

The Gurian Institute helps teachers understand how boys and girls learn differently, from preschool through high school graduation and into college. Michael Gurian, cofounder of the institute, working with Executive Director Kathy Stevens and a dedicated corps of training professionals, have helped thousands of teachers, schools, and school districts weave the science of gender into classroom strategies that engage both boys and girls, giving every child the best chance for educational success.

Jossey-Bass has published a series of books that address the differentiated learning needs of boys and girls: *Boys and Girls Learn Differently!* (Michael Gurian, with Patricia Henley and Terry Trueman), *The Minds of Boys: Saving Our Sons from Falling Behind in School and Life* (Michael Gurian and Kathy Stevens), *Strategies for Teaching Boys and Girls: Elementary*

Level (Michael Gurian, Kathy Stevens, and Kelley King) and *Strategies for Teaching Boys and Girls: Secondary Level* (Gurian, Stevens, and King). The material in these books is drawn from years of action research, working with educators at all age levels throughout the United States and in countries around the world. From individual training sessions in small, rural schools to districtwide, multiyear initiatives in diverse urban centers and suburban communities, the Gurian Institute is helping teachers implement curricula in ways that create environments that are both boy-friendly and girl-friendly. Positive results include higher grades, fewer disciplinary referrals, improved standardized test scores, and shrinking gender gaps, especially in the area of literacy.

This guide draws on materials from the books listed earlier. It will help you and your school design professional development activities to share during faculty meetings and short in-service sessions on exciting ways that classrooms can come alive when faculty, administrators, and parents understand students through a new lens—the lens of gender!

About the Books

Boys and Girls Learn Differently! A Guide for Teachers and Parents

Working with the University of Missouri in Kansas City and the Missouri Center for Safe Schools, the Gurian Institute began its action research in six school districts in Missouri during 1999 and 2000. Over this two-year period teachers were trained in how boys and girls learn differently and then went into their classrooms and implemented what they had learned. This book is both a reflection and a result of that project.

Part One of the book focuses on brain-based learning from three primary points of view: how human biology (including our neurological and hormonal systems) affects learning and behavior, how male and female psychological developmental cycles affect learning and behavior, and how gender differences in socialization affect boys' and girls' different learning styles. Understanding the nature and nurture of boys and girls is crucial to helping them maximize their academic potential.

Part Two of *Boys and Girls Learn Differently!* shows how teachers in the districts involved in the pilot put this knowledge to work in their classrooms, across grade levels and content areas, implementing innovative teaching strategies that improved grades and standardized test scores and had a positive effect on discipline. This is the basic text for beginning to understand how to differentiate learning for boys and girls.

The Minds of Boys: Saving Our Sons from Falling Behind in School and Life

In every developed nation in the world, there is a gender gap in literacy. Boys' standardized test scores, especially in literacy, are creating challenges for schools and districts as they struggle to help all children make adequate yearly progress. Boys earn more failing grades, are held back in greater numbers, represent the majority of students in special education, drop out of high school more often than girls, and ultimately earn fewer undergraduate and master's degrees than their female counterparts.

Gurian and Stevens wrote *The Minds of Boys* in response to this reality. The book focuses on male biological, emotional, psychological, and social development from birth through young adulthood. The book begins with brain differences between males and females, then moves immediately to practical strategies for both educators and parents, helping them work together to raise and educate boys who will grow into successful men. *The Minds of Boys* is the perfect supplemental resource for educators looking for ways to engage boys in the classroom and instill in them a love of learning.

Strategies for Teaching Boys and Girls: Elementary Level and *Strategies for Teaching Boys and Girls: Secondary Level*

Boys and Girls Learn Differently! sparked teachers in classrooms across the United States, Canada, Australia, and other countries to change the way they went about educating boys and girls. The results moved schools and districts to arrange professional development for their teachers and administrators, and a common request came after every session: "We want even more practical, hands-on strategies and tools we can implement in our classrooms tomorrow!"

These books are exactly what teachers were asking for—in two volumes, one for preschool through fifth grade, the other for middle and high school age levels. Each book has an introductory chapter that summarizes the theoretical framework of how boys and girls learn differently. Following are chapters full of strategies you and your staff can use for teaching reading, writing, math, science, social studies, music, art, physical education—every content area at every age level—in ways that will engage both boys and girls and result in improved performance and behavior.

Boys and Girls Learn Differently!

Note: the following page numbers and content references correspond to the paperback edition of *Boys and Girls Learn Differently!*

This is the foundation text for helping educators begin to truly understand how boys and girls learn differently. Whether this topic is one your school has already started researching or one you would like to initiate, this is a good place to start.

A gentle way to introduce the topic is through a book study. Provide each faculty member with a copy of the book (possibly as a summer reading choice). Schedule and convene the book study group during the second month back to school, giving any new teachers or those who didn't get to read it over the summer a chance to cover the introduction and first chapter before the first group meeting.

A good book study group plan will include the following elements:

- Recruit a group leader for your book study—someone clearly interested in the topic.
- Schedule monthly study group meetings no longer than one hour each.
- Provide a light protein snack and water during the study group meeting.
- Assign one chapter each month for members to read before the group meeting; with an introduction and six chapters, this book can be studied over the course of a school year.
- Have an individual or subgroup choose and prepare an activity to share with the whole group each month. This modeling will help participants gather ideas on how to implement activities in their classrooms.

Following is a suggested format for your book study group.

1. Convene the group with a reflection about how boys and girls learn differently.

Use the tables on pages 34–38 to begin the discussion; begin with the table corresponding to the age group in your school.

2. The group leader should prepare one or two general discussion questions for each group meeting.

A sample for use with Chapter One: How might the differences between male and female brain processing show up in your classroom?

A sample for use with Chapter Two: What do you find most challenging about teaching girls (or boys)?

3. Plan one activity for the entire group to participate in.

A sample for use with Chapter Two: identify key terms related to areas of learning style differences on pages 44–49. Write the word and definition on separate index cards. Shuffle the cards and deal. Play the game just like the children's card game Fish. The one to make the most matches and run out of cards first is the winner.

4. Ask group members to share the activities they prepared from the monthly reading. They should bring the activities as handouts, so that members can take the information with them if there is not enough time to try each activity.

Create a notebook that contains all the activities developed and shared in the study group. This notebook can become an excellent resource for all teachers in the school as they search for ways to implement strategies that serve both genders in their classrooms.

Encourage teachers to add new activities in the notebook as they develop them, and share these activities with colleagues.

5. Close the session with a humorous anecdote (a comic, funny story) that reflects the topic for the day.
6. Remind group members of the time and date of the next month's meeting.

As a culminating activity for your book study group, ask members to design a short presentation for all school faculty, administration, and staff. Consider taking your show on the road and sharing it at a school board or parent meeting.

The Minds of Boys: Saving Our Sons from Falling Behind in School and Life

Note: the following page numbers and content references correspond to the paperback edition of *The Minds of Boys*.

If your school has reviewed its performance data and determined, like most schools and districts across the country, that your boys are underperforming—especially in the area of literacy—this book can offer some great ways to improve performance. Again, a book study would be a valuable tool, but also consider addressing the issue in a more broad-based way.

Identify two or three faculty members who are most interested in researching how gender affects learning and have them design a short program for a faculty in-service session, using *The Minds of Boys* as the resource for the session.

Following is an example of how an hour-long introductory session might be designed.

- 0:00 Welcome to *The Minds of Boys*
- Read excerpt from *The Minds of Boys: Up to No Good* (pp. 43–44).
- Have participants pair up and think of examples of “boy energy” that they have witnessed in their classrooms. Ask some pairs to share their insights with the whole group.
- 0:10 Copy the bulleted list in the Did You Know? box (pp. 48–51), writing each bullet point on a separate index card or piece of paper. Give one bullet point to each of ten groups. Give the groups two minutes to review the cards and choose a member to share the information. Have each group share.
- After all groups have shared, collect the cards or papers. Write the following prompts on a piece of chart paper (or display them using PowerPoint or an overhead projector) and for each item ask “How does this affect how boys learn?”
- Dopamine
 - Corpus callosum
 - Temporal lobes
 - Hippocampus
 - Frontal lobes
 - Broca’s and Wernicke’s areas
 - Estrogen
 - Oxytocin
 - Amygdala
 - Brain stem
 - Rest state
- Ask: “How much do we know now as a group about the fundamental differences in how the male and female brains process information and learn?” Point out that these concepts are just the tip of the iceberg!
- 0:35 Have the group leaders select an additional activity from the book suitable for the age level of the school and design it so that all attendees can participate.

Example: Brain Break (pp. 99–102). Share a little about the importance of brain breaks during the school day. Relate it back to the things you learned about the male brain during the first activity. Then have the group participate in one or more examples of brain breaks. Use some music for at least one example.

0:50 Give all participants a sheet of paper and ask them to write one concern they have about the boys in their class. Collect the questions and use them to provide information and resources to the entire group. Designate a place in the teacher's lounge (such as a section of a bulletin board) where the answers can be posted. Recruit interested teachers to research and post answers.

Also ask teachers to indicate whether they would like a follow-up program to this in-service session.

Conclude the session by providing each faculty member with a copy of *The Minds of Boys*.

Strategies for Teaching Boys and Girls: Elementary Level and *Strategies for Teaching Boys and Girls: Secondary Level*

Following an introductory session based on *Boys and Girls Learn Differently!* or *The Minds of Boys*, consider a session designed on the content of *Strategies for Teaching Boys and Girls*, using the appropriate workbook for your students' age level.

At the beginning of the session, make sure each participant has a personal copy of the book to use during and after the session.

Elementary Level Session Outline (1.5 hours)

0:00 Welcome to *Strategies for Teaching Boys and Girls*

Do an activity that will serve as review for participants who have attended earlier session based on *Boys and Girls Learn Differently!* or *The Minds of Boys* and will be new to those who have not attended earlier sessions.

Example: Using the information on pages 3–8, design a game called What's the Difference? Using card stock, make a set of thirteen cards, each one with the following word(s) on it:

Corpus callosum

Brain stem

Limbic system

Cerebral cortex

Cerebellum

Language processing

Spatial processing

Sensory systems

Testosterone

Estrogen

Serotonin

Dopamine

Oxytocin

Make another set of thirteen cards with definitions of the terms, using the information on pages 3–8.

Make another set of thirteen cards with the words “And this means . . .” followed by information from the book about each of the terms and the implications for boys and for girls.

You will have created a set of thirty-nine cards. Pass out the cards. If you have fewer than thirty-nine people, give more than one card to some participants. If you have more than thirty-nine participants, have them pair up.

When you say “Go,” have participants find information in the book on pages 3–8 that matches that on their card(s). Give them a minute or so to locate the information. Then give them two to three minutes to find the cards that correspond to their card.

For instance, the participant who has the *Oxytocin* card needs to find two people: the person with the definition for a “tend and befriend hormone” and the person with the *And this means* card that says “girls will be motivated by their chemical system to establish and maintain relationships. Boys are less chemically driven...” When all three of these people find each other, they stop looking.

When the time you have allotted is finished, see if each word has found its definitions and meaning. Have each group share their word, their definition, and the respective meanings for boys and girls.

0:30 Keep 'em Moving

Chapter Two in the *Strategies* book discusses how movement helps the brain learn. Ask a volunteer to record the following question on a piece of chart paper and then ask it of the participants:

What opportunities do children in your class have for movement?

Have your volunteer record responses from the participants.

After defining “brain breaks”—activities that are simple and short, yet succeed in waking up the brain and priming it for learning—ask participants the following question:

Based on what we've learned about how boys and girls learn, how will brain breaks help boys? How will they help girls?

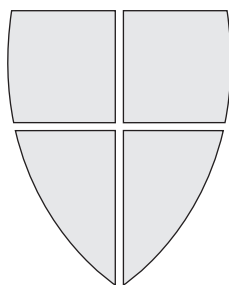
Look through the Quick Anytime Brain Breaks on pages 23–25 and select several to try with the group.

Discuss how to relate a brain break to content, then share a couple from the examples on pages 25–31.

0:45 Make It Visual

Divide your participants into groups of four to six each and give each group a sheet of chart paper and some markers. Ask them to show you what they have learned without using any words. Suggest that they brainstorm, then choose the three or four things they have learned that they believe could have the most impact on the students in their classroom, then draw them.

For example, have groups draw a coat of arms on a piece of chart paper with markers (like the sample that follows). Then have them add graphics inside each section showing what they have learned.



Give the groups five to six minutes, then have each group share their creation. Post each piece of chart paper, and ask the participants how they might use this activity with their students.

The following excerpt from page 37 of the *Strategies* book reminds us why it is helpful to incorporate visual activities into the curriculum:

Brain imaging research from Australia has recently established that when a student's visual-spatial activity in the right, spatial side of the brain is increased during learning, subjects are better able to tackle left-sided, language problems. Researchers began their research by looking at where mathematical learning takes place. They found that mathematical estimations and approximations are done in the right hemisphere, while mathematical computations are done in the left hemisphere. By stimulating the spatial side of the brain, both kinds of math could be learned better.

0:70 Making It Matter

Look at the information in the box on page 101. With the time you have available, discuss one or more of the parts of the brain and how they try to find relevance. Then ask your participants this question:

What happens in your classroom that helps this part of the brain find relevance?

For example,

Right ventral striatum—A part of the brain responsible for calculating risk and reward; this area helps people summon motivation for a task.

In the classroom: What is the potential risk or reward for doing a homework assignment?

0:90 Feedback

Ask participants for feedback on the session, and gauge interest in additional sessions using *Strategies* content. There is a wealth of additional material in the book from which to devise additional sessions!

Secondary Level Session Outline (1.5 hours)

0:00 Welcome to *Strategies for Teaching Boys and Girls*

What Could They Be Thinking?

Do an activity that will be review for participants who have attended earlier sessions based on *Boys and Girls Learn Differently* or *The Minds of Boys*, and new for those who have not attended earlier sessions. Using the information on pages 4–12, design an activity called What's the Difference? Using card stock, make a set of fourteen cards, each one with the following word(s) on it:

Cerebral cortex

Cerebellum

Corpus callosum

Limbic system

Prefrontal cortex

Hippocampus

Amygdala

Spatial processing areas

Sensory system

Testosterone

Estrogen

Serotonin

Dopamine

Oxytocin

Make another set of fourteen cards with definitions of the terms, using information from pages 4–12 in the book.

Make another set of fourteen cards with the words "And this means..." followed by information from the book about each of the terms and their implications for boys and for girls.

You will have created a set of forty-two cards. Pass out the cards. If you have fewer than forty-two people, give more than one card to some participants. If you have more than forty-two participants, have them pair up.

When you say “Go,” ask participants to find information in the book on pages 3–8 that matches that on their card(s). Give them a minute or so to locate the information. Then give them two to three minutes to find the cards that correspond to their card.

For instance, the participant who has the *Oxytocin* card will need to find both the person with the definition for the “tend and befriend hormone” and the person with the *And this means...* card that says “girls will be motivated by their chemical system to establish and maintain relationships. Boys are less chemically driven...” When all three find each other, they stop looking.

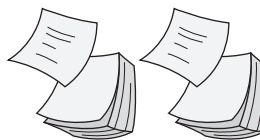
When the time you have allotted is over, see if each word has found its definitions and meaning. Have each group share their word, their definition, and the meanings for boys and girls.

0:20 Maximizing the Brain-Body Connection

Read the quote at the beginning of Chapter Two as a good way to set the stage for this section.

Try a few of the Quick Anytime Brain Breaks on pages 26–27.

Then use the Attack of the Stickies activity on page 29 to encourage participants to think of ways brain breaks can help both adolescent boys and adolescent girls in the classroom.



Supplies needed: sticky note pads (with one color for things that help girls and another color for things that help boys), markers or pens, and a flip chart or whiteboard to post the sticky notes on. Label the top of the flip chart or whiteboard with two categories: *Helping Boys* and *Helping Girls* (and see how many sticky notes will fit in each column).

0:40 Self-Assessment of Learning Styles

Ask participants to complete the self-assessment tool on pages 95–97 and score it. Put signs up in three areas of the room. Ask participants who scored higher in one area than others to stand near the sign that identifies their highest score. If they scored about the same in all areas, have them stay seated.

Have participants consider the questions at the bottom of the box on page 97.

This is a good self-assessment tool to use with secondary students to help them begin to understand their own learning styles and manage learning when they are in a classroom where the teacher's presentation style may not suit their own preferred style.

0:60 Reading Between the Lines: Figuring Out What Adolescents Will Read

When the National Assessment of Educational Progress reported that only 35 percent of twelfth graders were reading at a proficient level, secondary teachers across the disciplines became concerned. Literacy is key to broader learning.

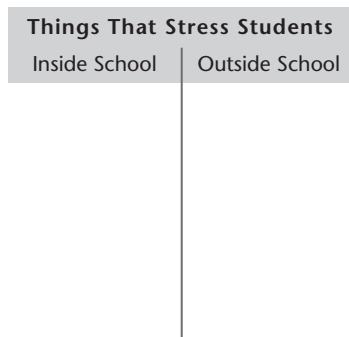
Share any gender-gap data you have for your school or school district. Give participants a few minutes to brainstorm how the literacy issue affects their content area. Call the group back together and ask for input from the brainstorming session.

Since boys tend to be at the bottom end of the gender gap in literacy, check out the list of nontraditional reading material on page 112. Ask your group how many of the items on the list they now incorporate into their curriculum. Which items could they include that might engage boys more and still meet the needs of their curriculum?

Challenge your participants to try including at least one innovative kind of reading material into their classroom in the next month.

0:80 After the Final Bell Rings

Stress in the Lives of Adolescents (pages 147–149): on a piece of chart paper or a whiteboard, draw a diagram like the one shown here.



Have participants give suggestions for things to add on each side of the list.

After you have a representative list, ask these questions about each item:

Do you as a teacher have any control over this item?

If so, what can you do to remove it from the list or minimize its stress for your students?

Example: one item under “inside school” is usually “grades.” One way to minimize the stress of grades is to offer options for the completion of assignments, thereby allowing students to maximize their strengths (and their own learning style). Another way is to offer an array of options for earning extra credit to bring up grades.

0:90 Feedback

Ask participants for feedback on the session and gauge interest in additional sessions using *Strategies* content. There is a wealth of additional material in the book suitable for additional sessions!

Designing a Half-Day In-Service Session on *Boys and Girls Learn Differently!*

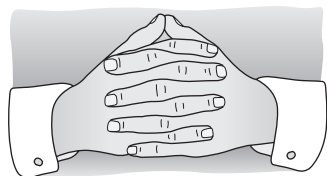
You can combine information from all four of the books we've talked about and design a three-hour in-service session for your school. Following is a template offering time frames and recommended activities. Remember that there are many more activities in each book, so you can tailor the session for your specific population. Also, in your half-day session you can use activities presented in the individual sessions above.

The best arrangement for this session is to gather participants in table groups of six to eight. Provide each table with markers and paper.

0:00 Welcome to *How Boys and Girls Learn Differently!*

Thumbs: Have your participants fold their hands (as shown in picture that follows) the way they are most comfortable. Then ask them to “flip their thumbs.” Ask them how that feels. Generally, responses will include “awkward, funny, strange, uncomfortable” and the like. Ask if anyone is actually in pain. (This is generally followed by laughter.)

Suggest that some of the things you will talk about today may feel a bit like “flipping your thumbs.” A little unfamiliar and uncomfortable. Thinking about how boys and girls learn differently from a brain science perspective is not what most teachers learned during their teacher training. But thinking about it and considering it probably won't hurt! Just ask your participants to keep an open mind and be open to change.



Ask whether anyone in the group actually had a semester-long course in gender and learning.

0:10 Just the Facts!

Before the session, go through Chapter One of the book and write individual facts about male and female brain development on three-by-five-inch index cards. Make enough cards so that each participant in your group will have one card each.

Examples include

By six months in utero, male and female babies have different brain designs (p. 3).

Brain scans—like MRI, PET, and fSpect scans—let doctors watch the living brain at work (p. 4).

Pass the cards out and give participants about two minutes to share their cards with others at their table. Then tell them you are going to give them three minutes to get out of their chairs, move around the room, and share their fact with as many people as possible in the time allotted. (Adjust the time according to the size of your group.) At the end of the designated time, call participants back to their seats and ask some people to answer these questions:

Did they hear a fact that surprised them?

Did they hear a fact that didn't sound reasonable?

Did they hear a fact that explained things they see in their classroom?

This is a great way to start people thinking about brain differences between boys and girls.

0:20 It's important to find out how teachers feel about teaching boys and girls.

This activity will get participants really thinking about the challenges each gender presents in the classroom. Ways to address those challenges are found in each book referenced.

Using the Attack of the Stickies activity (Strategies: Secondary, on p. 29), give participants (individually or in small groups, depending on size of the overall group) three to four minutes to post responses to these questions on a flip chart (four pages) or whiteboard (four sections), as shown in the diagram on this page.

What do you most enjoy about teaching girls?



What do you most enjoy about teaching boys?

What do you find most challenging about girls?



What do you find most challenging about boys?

After all responses are posted, recruit one volunteer for each question and have him or her collate the responses into categories for the same or similar answers.

This is a good time for a break—and food is always welcome!

0:50 Debrief the prebreak activity.

First share responses to the question, "What do you most enjoy about teaching boys?" Generally, the kinds of answers to this question include things like "energy, willing to take risks, sense of humor, they don't hold a grudge," and so on. After you reflect on these answers, ask the group: "How many of the things we say we enjoy about boys do we consider when assessing their performance and giving them grades?"

The group will usually admit, "Not many, if any."

Next, move on to the challenges of boys, which generally include things like "trouble staying on task, don't do homework, not organized, poor handwriting, less verbal," and so on.

Ask again: "How many of these things are considered when assessing performance and giving grades?"

Participants tend to reply, "Generally, most of these challenges are considered."

Challenge the group to find ways to include boys' strengths (the things we generally enjoy about teaching them) in ways to help them get credit for them. Although we can't grade "sense of humor," we can include more humor in delivery of curriculum and perhaps engage boys more, giving them a chance to improve performance! Have the group brainstorm other ways to build on boys' strengths.

Repeat the process with the two questions about girls.

0:60 Dealing with Discipline!

Boys and Girls Learn Differently! (pp. 159–167) discusses different methodologies for dealing with disciplinary issues. Choose a couple of examples from those pages and share them with the group. Ask your table groups to take five minutes and discuss the disciplinary issues they face most often in their classrooms.

Have each group record the top two or three discipline problems they face. At the end of the allotted time, have groups trade their problems and then come up with possible ways to address the problems they were given. Take time to share at least one problem and set of possible solutions with the entire group.

This activity helps teachers remember that their colleagues can be a great source of support and assistance.

1:20 Brain Break!

Review the Anytime Brain Breaks (pp. 23–24) and choose one or more to include here.

1:30 The Myth of Plasticity (*The Minds of Boys*, pp. 58–61)

Share the following story of an exchange between a US Navy ship and Canadian authorities off the coast of Newfoundland:

US Ship: Please divert your course 15 degrees to the north to avoid a collision.

Canadian reply: Recommend *you* divert *your* course 15 degrees to the north to avoid a collision.

US Ship: This is a US Naval vessel. We repeat: *Divert your course.*

Canadian reply: No, you divert *your* course.

US Ship: This is the USS Coral Sea, a large warship of the US Navy. *Divert your course or we will be forced to take countermeasures.*

Canadian reply: This is a lighthouse. It's your call.

This story is usually followed by much laughter, so when the laughter subsides, discuss the lighthouse metaphor for gender and the brain.

How is the male or female brain like a lighthouse? It's not going to change (or "move its gender learning style") just because we want it to—gender in the brain has very limited plasticity. What do we mean? Our brain's language centers are wired to learn any language on earth—we learn the language(s) spoken around us. If you happen to be born in Maine, the English you speak will sound quite different from that of a child born in Texas. And if you were born in Alabama, adopted at one day old by a family in France and you grew up in a household speaking French, you would also learn French.

On the other hand, the gender learning style we are born with, male or female, will not vary much between the United States and France (or anywhere else). That gender-in-the-brain predisposes us to certain ways of learning and processing information. To ignore this fact is to risk running head-on into a lighthouse!

At the same time, the ship can be interpreted as the gender role that our culture expects from us, and that changes over time. Gender roles can change from generation to generation, whereas gender itself does not change. Have your groups spend a couple of minutes talking about how different the gender roles were for their grandparents, their parents, themselves, and potentially for their children and grandchildren. Have them think of some specific examples of what has changed over those generations for both girls and boys. Share some of these examples.

Next, compare these changing gender roles to gender. Note that girls and boys all over the world have biological tendencies toward "boy energy" and "girl energy" or "boy learning styles" and "girl learning styles," no matter what gender role their culture imposes on (or facilitates for) them.

1:45 An activity from *The Minds of Boys* session

Copy the bulleted information in the Did You Know? box (pp. 48–51), putting each bullet item onto a separate index card or piece of paper. Give one card to each of ten groups. Give the groups two minutes to review the card and choose a group member to share the information. Have each group share.

After all groups have shared, collect the cards or papers. Write the following prompts on a piece of chart paper (or display them with PowerPoint or an overhead projector) and ask “How does this affect how boys learn?”

Dopamine

Corpus callosum

Temporal lobes

Hippocampus

Frontal lobes

Broca's and Wernicke's areas

Estrogen

Oxytocin

Amygdala

Brain stem

Rest state

Ask: “How much do we know now as a group about some of the fundamental gender differences in how male and female brains process information and learn?” Point out that this is only the tip of the iceberg!

2:00 Group break

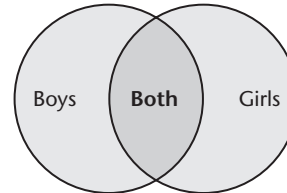
2:30 Activity adapted from the Elementary Strategies session

Assessing Learning

Divide your participants into groups of four to six each and give each group a sheet of chart paper and some markers. Ask them to show you what they have learned today without using any words. Suggest that they brainstorm for a few minutes, then choose the three or four things that they believe could have the most impact on the students in their classroom, and draw that.

For example, you can ask the groups to draw a Venn diagram on a piece of chart paper with markers (as shown in sample here). Then have them put graphics inside each section showing what they have learned.

Strategies that are especially helpful to



Give the groups five to six minutes, then have each group share their creation. Post each sheet of chart paper and ask the participants how they might use this activity with their students.

This is one potential template for a three-hour in-service session to help your faculty, administrators, and staff begin to better understand how boys and girls learn differently. To truly embed this learning, you might want to consider schoolwide or districtwide training facilitated by the Gurian Institute. Visit the Web site (www.gurianinstitute.com) to explore all the options available through the institute, from one-day professional development training to multiyear formats that reach educators and parents. Check out the Schools That Are Succeeding section of the Web site to learn about the exciting things that are happening from preschool through high school!