

Why Educate Them the Crespi Way?

Independent Analysis of Crespi's Holistic Approach to Boys

By

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Executive Summary

Crespi Carmelite High School (Crespi), in Encino, CA, has identified itself publicly as a school that understands boys. For prospective students and parents, the school's literature reflects its holistic approach to male education and development. This holistic statement places Crespi at the leading edge in both college prep academic education and the social, emotional, and character development of diverse boys into healthy adulthood.

Meanwhile, the world's boys make headlines every day, and not necessarily the kinds we might prefer. Struggling in school and social emotional development, boys get most of the low grades and low standardized test scores worldwide. They drop out of school more than girls and are diagnosed with learning disabilities at three times the rate of girls. They also comprise most discipline referrals, school suspensions, and expulsions.

When boys fail or fall behind, our culture often sees them as inherently flawed, but are they, or is our culture letting them down? Is it possible that some systems we now have for raising, educating, and nurturing boys are mismatched with the way that many of our sons feel, think, and succeed? Simultaneously, are some micro-cultures successfully grappling with boy's issues today?

In this context, The Gurian Institute (GI) has been tasked with studying Crespi's holistic approach to educating boys. To provide this study, we ask two questions: 1) "Does Crespi live up to its promise?" and 2) "Is Crespi potentially a safe home for all boys, not just a particular kind of boy?" This White Paper answers these questions and provides in-depth analysis of Crespi's pedagogy, community, and culture.

The Gurian Institute (GI) has been associated with Crespi since 2005. In 2006, after GI-embedded training and classroom observations at Crespi, the school became a Gurian Model School. In 2022, Crespi decided to hire GI, under the direction of Michael Gurian, to provide this objective analysis of Crespi's approach to boys.

Crespi requested the study both to help it constantly improve as a system and to gain insight into whether Crespi's strengths might make it a model for the education of boys in a national context. Before the research for this GI study, Crespi was already a successful college prep boys' high school, thus GI did not enter its study with an agenda either to attack or to inflate.

Having spent much of the 2022 – 2023 school year studying Crespi, GI has found that the holistic approach to boys at Crespi is both successful in its own right and a model for boys' education, both regionally and nationwide. To remain so positioned, Crespi administration, staff, and the Board will need to exercise continued vigilance to core goals, and faculty will continue building boys into good men.

Parents and community are a part of the puzzle: they collaborate with the school to nurture and mentor the whole boy in his teen years, including intervening if a boy is in distress. GI finds Crespi to be a successful school in part because of these parents and because the boys themselves invest in and inspire "the Crespi way." Cohesiveness and maturity in the Crespi community is a significant strength at the school.

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Crespi Carmelite High School, The Gurian Institute, and Research Methodology

For those not familiar with Crespi, a brief background is useful.

The Crespi Mission Statement reads: *To build men of character and faith unified in brotherhood and formed through a contemporary, Catholic, college preparatory education in the Carmelite tradition of prayer, community, and service.* Further noted in Crespi literature is its vision: *To be a dynamic learning community where tradition and innovation prepare Crespi Men for success in all facets of life.*

Crespi's published Values include *academic excellence, holism, character development, collaboration, family focus, preparation for life and college, welcoming community, and social justice.* These are inculcated in *The Crespi Man*, whose three primary elements are: *moral and spiritual focus, lifelong learning, and becoming a productive and mature adult.* To become a Crespi Man, a boy will be led in understanding Judeo-Christian, Catholic, and other religious formation principles; join in prayer, meditation, or other self-reflection to deepen his relationship with God (or Higher Power) and discover his own personal gifts and commitment to the diversity and dignity of all people.

The Crespi Man is further coached to utilize reason, creativity, current technologies and science, intellectual curiosity, and broad curricular interests connected to real life situations, including college and workplace preparedness. In his four-year journey to becoming a productive and mature person, a Crespi student will strive to balance physical, mental, and emotional wellbeing; develop resilience via challenges and adversity; develop social skills and strong personal relationships; and commit to democratic service and justice.

The Gurian Institute has been charged with studying Crespi's ability to follow through on its mission, values, and high standards.

The Gurian Institute

Led by Dr. Michael Gurian and Gurian Institute staff, GI has trained more than 60,000 professionals and more than 2,000,000 parents. GI helps schools and communities inculcate boy- and girl-friendly programming throughout school and community culture. GI's work regarding the minds of boys and girls includes the whole gender spectrum.

GI success data in schools, districts, and organizations has emerged over more than two decades with some schools designated Gurian Model Schools (please see the GI website, www.gurianinstitute.com for more on data and schools). A Gurian Model School was featured in a *Newsweek* cover story and other schools in a cover story of the *American School Board Journal*; others, on the *Today Show* and *NBC News*. Crespi is a Gurian Model School.

With observation reports from GI Program Director Eva Dwight, M. Ed. and GI Master Trainer Glynetta Fletcher, Ph.D., Michael Gurian is author of this White Paper. He formerly taught at Gonzaga University, has been a marriage and family counselor in private practice for 33 years, is the *New York Times* bestselling author of 32 books, and co-founded GI in 1997. *The Wonder of Boys* has been credited with "catalyzing a

burgeoning boys' movement" (USA Today). To learn more about Gurian, please visit www.michaelgurian.com.

Research Methodology for this White Paper

General research herein regarding boys' development is both qualitative and quantitative and has been gathered over a thirty-year period by Gurian and the Gurian Institute. I summarize this research in this White Paper because it forms a ground for Crespi's commitment to boys and their families. This research includes:

- *Statistical benchmarks and analysis from governmental and private agencies such as the Department of Education, Department of Justice, Pell Institute, Global Initiative for Boys and Men, OECD, and the United Nations on the state of boyhood in our nation and world.

- *Action research from the Gurian Institute's twenty-five years of school-based interventions and training.

- *Case studies and clinical data from counseling and coaching practices with details and names changed for confidentiality.

Research regarding sex and gender on the brain, both qualitative and quantitative, including a meta-analysis of more than 1,000 brain-based studies by Michael Gurian. References for dozens of these studies are housed in the final section of this document, and 1,000 more can be found on the Research page of www.michaelgurian.com.

This research presents the human brain as sexually dimorphic: male and the female brains are formatted via chromosome markers (XY) *in utero* to develop differently, including each brain's individual place on the gender spectrum. When we look at brain scans, we can see the gender spectrum represented on "bridge brains" (male and female brains that tend to bridge between sexes in multiple brain areas). Thus, while there is no single boy brain or single girl brain for 8 billion people (gender stereotypes are not helpful), boys and girls do learn and grow differently; each community does best when it understands both the "rule" (sexual dimorphism) and "exceptions to the rule" (bridge brains). This understanding of the brain will be further elucidated in a moment, as it also comprises the scientific ground for Crespi's holistic approach to boys.

Our GI research defining Crespi goals and the school's follow through on those goals is mainly qualitative, and includes the following:

- *A comprehensive study of existing Crespi literature regarding Crespi's core values, holistic development of boys, and values.

- *Multiple observation of the buildings and grounds, including athletics, gym, fine arts, common areas, streets, student pick up locations, offices, cafeteria.

- *Classroom observations by Dr. Gurian, Dr. Fletcher, and Eva Dwight, M.Ed. on multiple school visits.

- *Interviews with Board members, administration, and faculty over a three-month period and interviews with students, parents, and alumni over multiple months.

- *Monthly meetings with administration and faculty to continue data gathering and inclusion and analysis of data provided by Crespi staff.

Boys' Struggles and the Boy Crisis

Crespi's educational system is aware of boys' struggles in post-modern life. Important to our GI study of Crespi's commitment to boys' development is the school's understanding of the worldwide *boy crisis*. Crespi is aware of the following statistics and has committed to playing a part in healing ending this crisis.

*America has the highest rate of male incarceration per capita of any country in the world. Among males 17 or younger, the boy-to-girl ratio in correctional institutions is 9:1. Among 18 – 21-year-old adults, the ratio grows to 14:1.

*Suicide kills tens of thousands of American boys and men per year and males take their own lives at between 3 and 4 times the rate of females.

*Boys are twice as likely as girls to be victims of violence in America but in certain age groups, the gap is 6:1. For instance, among adolescent children, six males die from violence for every 1 female. Boys of color in the inner city are considered “highly likely” to die from violent causes by or about age 25—the end of male adolescence.

*Boys receive 2/3s of the Ds and Fs in our nation's schools but less than 40% of the As. While some boys test well and do well, in the aggregate there is no racial or ethnic group in which boys are doing better than girls. For instance, males are 1½ years behind females in literacy skills, and even farther behind in impoverished communities.

*Boys are twice as likely as girls to be labeled “emotionally disturbed” and twice as likely to be diagnosed with a behavioral or learning disorder. One in every 42 boys is living somewhere on the autism spectrum. This and other male-specific brain disorders are rising exponentially year by year. Mortality from drug overdoses and alcohol-related illnesses are almost three times higher among young men than women.

*One in 11 Americans, most of them boys and men, are diagnosed with ADD/ADHD. Gurian Institute research in 2,000 schools shows that at least one third of schoolboys diagnosed with ADD/ADHD are misdiagnosed. While some boys do need medication, millions of males are being medicated unnecessarily, with some severe consequences for motivation and growth. Given that 80% of the world's Ritalin is used in the U.S., we have a particularly American crisis.

*Boys are four times as likely as girls to be suspended or expelled from early childhood and K – 12 learning environments. Gurian Institute research shows schools from Pre-K through college struggling in academic and behavioral markers in large part because teachers and staff have not received science-based training in how boys and girls learn differently. Graduate schools that train teachers don't teach it to future teachers because they don't find it politically correct. Without this training, hard-working teachers, mainly women, are often unable to grow male energy and acumen as they wish they could. In 2020, declines in college enrollment were seven times greater for male than for female students.

Harvard Psychologist William Pollack, author of *Real Boys: Rescuing Our Sons from the Myths of Boyhood*, says this about hidden sex and gender bias in American classrooms:

Our schools in general are not sufficiently hospitable environments for boys and are not doing what they could to address boys' unique social, academic, and emotional needs. Today's typical coeducational schools have teachers and administrators who, though they don't intend it, are

often not particularly empathic to boys; they use curricula, classroom materials, and teaching methods that do not respond to how boys learn; and many of these schools are hardly places in which most of our boys long to spend time. Put simply, I believe most of our schools are failing our boys.

*The latest PISA and OECD research confirms Pollack's analysis statistically: boys are behind girls in developmental, behavioral, academic, and social markers in all 52 industrialized countries. Weekly, sometimes daily, GI and I receive emails from parents or professionals in China, Japan, England, Spain, Qatar, Nigeria, Brazil, Vietnam, Australia, and many other countries asking, "what can we do to help our boys?"

The boy crisis is a worldwide problem.

Note: Original references to these statistics appear in Michael Gurian's *Saving Our Sons* (2017), Warren Farrell's/John Gray's *Boy Crisis* (2019), and Richard Reeves/Brookings Institute's *On Boys and Men* (2022).

A further way to understand the state of boyhood lies in the following graphics, used with permission of Tom Mortenson who developed them for the Pell Institute of Higher Education. (You can find more resources of this kind on the Pell website and <https://community.coenet.org/peoarchive/archive>.)

The first graphic shows multiple factors in which boys are struggling, and the latter graphics target specific areas.

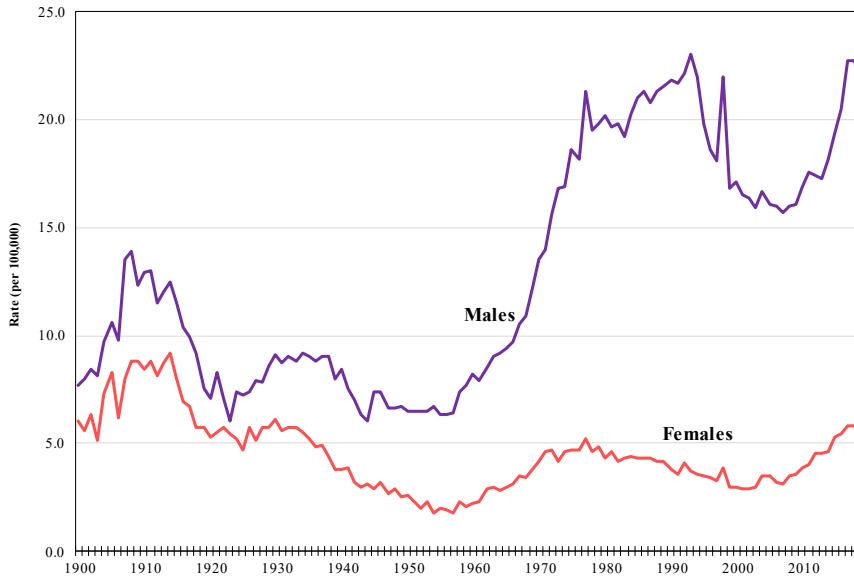
For Every 100 Girls/Women.....	There are this many Boys/Men....
Who take AP/Honors courses in Art/Music	54
Who earn an associate's degree	63
Who take AP/Honors courses in Foreign/Classical Languages	64
Who take AP/Honors courses in English/Language Arts	64
Enrolled in US graduate schools	73
25 to 29 years who have at least a master's degree	73
Who earn a bachelor's degree	74
Who earn a master's degree	74
Enrolled in US colleges	77
Who are in the top 10% of their high school class	79
Who take AP/Honors courses in Natural Sciences	79
25 to 29 years whose highest level of education is an associate's degree	80
25 to 29 years who have a first professional or doctor's degree	81
Who take AP/Honors courses in math	82
25 to 29 years whose highest level of education is a bachelor's degree	85
Who take the SAT test	89
Who earn a doctor's degree	90
25 to 29 years who have at least some college but no degree	94
Whose entry into kindergarten is delayed	139
K-12 in public schools classified as having mental retardation	140
Who repeat kindergarten	145
Who are homeless	154
Ages 3-17 years diagnosed with communication disorders	168
Who abuse illicit drugs and alcohol	180
Who have problems with alcoholism	200
In K-12 and classified as having a specific learning disability	207
Who die by opioid overdose	212
25 to 34 years old who die	232
4-17 years diagnosed with ADHD	237
Suspended from school	240
Who are homeless and unsheltered	242
15 to 24 years who die	280
Expelled from schools	291
Ages 15 to 19 who commit suicide	293
Who receive services in public schools for autism	300
In public schools classified as having emotional disturbance	355
Ages 20 to 29 who commit suicide	450
Ages 20-29 who die of homicide	648
Under age 18 who are in a correctional facility	770
In adult correctional facilities	1,000
Who die on the job	1,294
In a federal prison	1,333

In this “For Every 100 Girls” graphic, the top half lists areas in which girls outperform boys and the bottom half lists areas where boys underperform in comparison to girls. In many cases, the word “underperform” could be considered an understatement.

These next two graphics look specifically at two areas of concern nationwide: social emotional development of boys (via suicide statistics) and college matriculation.

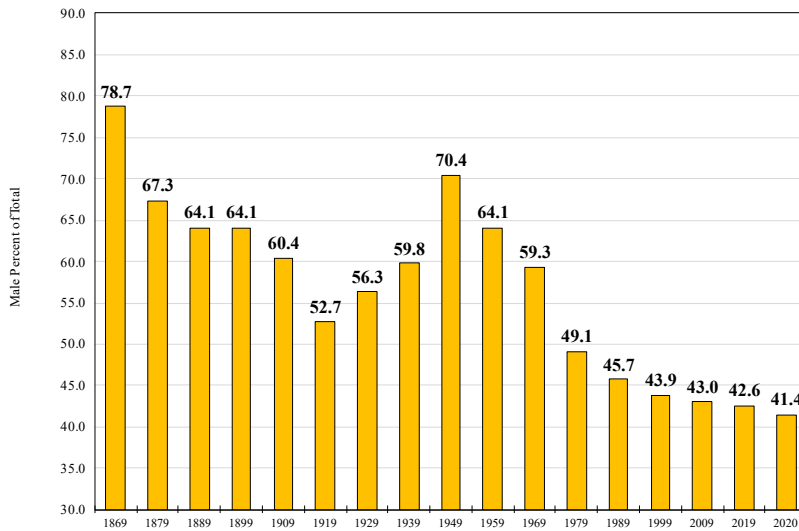
While female superiority in both areas may well be good for women, it can be seen as problematic for women, as well, once we realize that boys’ development, if not holistically protected, will negatively affect girls and women later in life.

**Suicide Rates for Males and Females Ages 15 to 24
1900 to 2019**



Source: US Census Bureau

**Male Share of Higher Education Enrollments
1869 to 2020**



Source: National Center for Education Statistics

Crespi's staff joins with GI and others to ask four questions regarding the data.

- *Do boys' struggles in our society occur because males are inherently defective?
- *Because males are still holding onto former patriarchal roles and power while the world is moving on without them?
- *Because complex systems in which we now raise and educate boys are unfriendly to boys (though we may not realize it)?
- *Because of a combination of factors in nature, nurture, and culture that mitigate

male strengths and increase male developmental issues in our present society?

From a research perspective, GI finds that a “Yes” to the first question doesn’t get us anywhere, though some academics and pundits enjoy the “males are defective and no longer needed in the world” scenario.

A “Yes” to the second question can fit some boys and men, though not the majority.

A “Yes” to the third question will fit more boys and men, closer to a majority.

A “Yes” to the fourth is most helpful to us: it confronts all three primary factors in child development—nature, nurture, and culture--thus, it can include analysis of responses to the first three questions.

Crespi pursues its goals and values as a boy-friendly college prep environment knowing the pain and loss boys are experiencing in our society. The boy crisis in part inspires Crespi’s pursuit of systemic models that account for the whole boy. In our study of Crespi, GI has found that Crespi works with boys of all races, religions, creeds, and groups to grow boys through the teen years into successful young men against the backdrop of a boy crisis worldwide and using brain science as a powerful tool for male development.

Nature, Nurture, and Culture All Matter

The four questions asked moments ago speak to various aspects of child development, especially the integration of sex and gender into systems analysis. Crespi, like all schools, is a social system (culture), biological environment (nature), and psychological structure (nurture) all wrapped into one.

At its best, a system integrates nature, nurture, and culture to make “nature *versus* nurture” mute. Indeed, there really is no “versus” because no nurturing environment can exist without biological members, and no biological members without environments. Crespi has worked to integrate all three bedrock elements--nature, nurture, and culture.

*Regarding *culture*, it has set up a Catholic educational system whose principles for cognitive, character, and social-emotional development unite both ancient and evolving doctrine.

*Regarding *nurture*, it has built a safe, self-sufficient, developmentally exciting school environment focused on social-emotional principles of Crespi brotherhood, the Crespi Man, and servant leadership.

*Regarding *nature*, it has committed to integration of the science of neurobiology into its pedagogy and as such, Crespi can include all boys, even those who don't fit stereotypical masculine assertions.

The Nature Part of the Puzzle at Crespi

Throughout its history (founded in 1959), Crespi has worked to understand the *nature of boys*—who they are, how they think, how they feel, what their interests and motivations are, and who they are striving to be. Each founder and staff member at the school has been a “citizen scientist” in “studying boys.”

As a result, and since the school's founding, Crespi has worked to adjust to boys themselves as the boys adjusted and adapted. The school evolved through the 20th century confident in its successes but always wondering whether a scientific approach could be increased at the school, especially the utilization of gifts of ground-breaking neuroscience that increasingly explained the complexity of boys' minds and hearts.

In the early 21st century, when sex and gender neuroscience thrived not just academically but in the public sector, Crespi began to look toward this neuroscience for further clues about not just male development but effective pedagogy, best practices for integrating Crespi values into boys' lives, and expanded palettes for what is male, what boys need, and what the families of boys need.

In 2005, Crespi discovered the book *Boys and Girls Learn Differently* (Gurian, et.al. 2001). From there, Crespi staff received training in brain science from the Gurian Institute and understood how boys and girls learn differently at an inchoate, neurobiological level; the school further understood itself to be a potential laboratory for science-based success with boys.

Much of Crespi's traditional approach worked well without the new science, but some of Crespi's present innovations grew from a shift toward the science, which has made a major difference as more and more families understand Crespi's research-driven approach to *sexual dimorphism*.

Sexual Dimorphism

Sexual dimorphism is male/female brain difference. Male and female brains differentiate *in utero* via markers on the X and Y chromosomes. That boys and girls learn and grow differently (sexual dimorphism) is common sense in most circles but suspect in some, especially in some social media. Because of this social confusion, I will present a brief review of the science here.

In human history, male/female difference was noted and assumed, but this assumption led to unfairness toward women. As the feminist revolution changed our society, gender equality became a necessary human focus. During this time, an academic argument of sameness was made mainly via sociology and social psychology: that if we assume gene-based male/female difference (sexual dimorphism) we would perpetuate inequality.

In this vein, in the 1960s – early 1990s, some academic thinking on sex/gender shifted toward the view that boys and girls are blank slates when born and socialized to be boys and girls and women and men, a socialization that must change. In the question of nature vs. nurture, nurture claimed some victory during those decades, and sexual dimorphism became anathema in some political circles.

In the 1990s, however, brain scans increasingly showed how differently male and female brains work—on tasks, in emotional life, in sexual life, on a gender spectrum, in mental and physical health, in motivation and learning, and much more. While there are still some people arguing against sexual dimorphism, it is now settled science from the GI viewpoint (please see the Endnotes to this White Paper for significant studies).

Quite importantly, in April 2019, M.D. Wheelock, J.L. Hecht, E. Hernandez-Andrade, and their colleagues provided fetal brain scans to the public in, “Sex differences in functional connectivity during fetal brain development,” *Developmental Cognitive Neuroscience*. On these fetal scans, we see significant male/female brain difference already (pre-socialization) *in utero*.

Informed by this kind of current science, Crespi’s literature reads: “If you think boys are wired differently, Crespi is for you.” The school is following sexual dimorphism theory elucidated by various experts in the field, including three quoted here.

David C. Page, M.D., professor of biology at MIT: “Our genomes are 99.9% identical from one person to the next as long as the two individuals being compared are males to males and females to females. But if we compare the two sexes, the genetic differences are 15 times greater than the genetic differences for two males or two females.”

Marianne J. Legato, M.D., in *Eve’s Rib*: “Everywhere we look the two sexes are startlingly and unexpectedly different, not only in their internal function but in the ways that they experience illness. To care for them, we must see them as who they are: female and male.”

Catherine Woolley, Ph.D., a Northwestern University neuro-endocrinologist: “Sex differences in the brain are real at the molecular level, for instance they are now found in mechanisms of pain, effects of stress, how an autism-linked gene regulates neurophysiology, how an intellectual disability-linked gene affects the biochemistry of synapses, and much more.”

To know that boys and girls are set up differently does not mean girls or boys, women or men, and anyone on the gender spectrum are inferior or superior, nor do differences between sexes negate gender equality. In eco-systems, difference is everywhere--fully inherent in all nature and evolution, and equality-focused. Different sexes and genders are not in opposition but are complementary. Here are six of the more than one hundred sex differences we know of to date that profoundly affect education and social development of boys and girls.

Gray and White Matter Activity Difference

Richard Haier, University of California-Irvine neuroscientist, has studied brain scans over the last three decades from all races and multiple continents. He and his colleagues have discovered that girls and women utilize up to 10 times more *white matter activity* than boys and men and boys and men up to 7 times more *gray matter activity*. White matter activity moves signaling throughout the brain instantly while gray matter activity houses a task in a specific area of the brain without sending the signaling as fully elsewhere.

This white/gray matter activity difference is one of the reasons that traditional schooling can become a crisis point for so many boys: the school systems teach much more towards girls' white matter multi-tasking brains, much less toward boys' gray matter single-task-focus brains.

Frontal Lobe Use Difference

Richard Haier and colleagues have also discovered that 80% of female learning and intellectual activity transpire in *the frontal lobe* of the brain (where executive decision-making, impulse control, organization, and word production take place); in contrast, male learning and intellectual activity transpire only 0 – 40% in the frontal lobe. These findings have been confirmed at Cambridge University and numerous others in brains of all races from all continents. For reasons of genetic neurobiology, males tend to emphasize learning in gray matter areas further back in the brain than females.

The fact that males have more impulse, organization, and word/literacy issues than females finally made sense to interested educators once brain scans revealed location of activity beginning in the 1990s. We understood that traditional schooling expectations leaned toward assuming a child development baseline and tempo of development in the frontal lobe suitable to far more girls than boys. Furthermore, behavior standards and assessments saw boys through the lens of girls' frontal lobe activity, and quite often, ended up evaluating boys as defective in comparison to girls, without realizing that "difference" is not "defect."

While some male behavior must be disciplined, brain science is now showing us that much of the discipline provided to boys in schools is causing--especially among boys of color and low-income boys--a school-to-prison pipeline. When, however, schools move toward a brain science-based approach to boys and girls, they diminish discipline referrals, as well as bullying, suspensions, and expulsions, which ends up mitigating the school-to-prison pipeline and saving lives.

Male Cerebellum Dependence

Where teaching to the girl's frontal lobe makes sense given her hyper-use of that cortex during the school day, teaching equally toward the boy's *cerebellum* makes sense in a boy-friendly educational environment. The cerebellum is the "doing center" at the base of the human brain. Schools like Crespi that flourish with boys do so in part because they understand "cerebellum dependence."

Neuroscientist Daniel Amen has conducted multiple studies including a recent 49,000 scan study of male and female brains; his scans include all races and groups. Dr. Amen's scans show males to be *cerebellum dependent* for much of their learning and living throughout the lifespan. This means, for the whole male brain to be activated, males often need the movement/doing center of the brain to be activated.

One of the primary principles of a "boys and girls learn differently" nurturing school is the shared realization among faculty that boys don't tend to sit still as well as girls for as long; when they do sit still a long time, they don't learn or retain as much as girls in the aggregate.

When boys do move around the room, near their desk, in the hallways, on playgrounds, their cerebellum is activated, and that activation sends signaling upward into the frontal lobe and other learning areas. As a brain-friendly boys' school, Crespi puts significant focus into training teachers to keep boys moving during a school day.

Word Production and Word Use in the Brain

Deborah Kimura, Ph.D., and colleagues have studied male and female brains worldwide for *word use and word production*. In their brain scans, they see language-related brain activity in girls on both sides of the brain, whereas word activity in boys tends to mainly occur on the left side. Because girls and women do more words in more multiple areas on both sides of the brain, they connect words to senses, feeling, and memories more than boys tend to do, and with more variety.

In most schools today, "use your words" is considered the gold standard for both emotional life and cognitive education, but boys do not have as much immediate access to necessary words as girls, and often need other strategies for accessing words-for-feelings than "use your words." That boys are behind girls in literacy in all industrialized countries should not surprise us. When English, Social Studies, or other writing related classes require tests, homework, worksheets, papers—and lots of them to produce lots of words—many boys will often not be able to do as well as girls at baselines.

When, however, schools and classrooms account for male/female word use difference, they notice that the right side of the male brain (where girls are doing words) emphasizes spatial-mechanicals (objects moving in space around them) and visual-graphics (pictures and visuals). These teachers thus allow boys to use graphic, visual, and spatial stimulants to access male right side brain function--from these alternative methods, teachers can often stimulate male word areas on the left.

Because Crespi as a system is aware of brain difference, its classrooms often utilize spatial and visual-graphic stimulants, not only in English, Social Studies, and similar classes, but also in math and science classes where word production is needed.

The Brain Rest State

Ruben and Raquel Gur at the University of Pennsylvania were some of the first neuroscientists to study the ways that male/female brains enter *rest states*. This “rest state” is also known as “zone out,” “boredom,” or “blank brain.” Boys’ brains can enter boredom states numerous times in a traditional school day, especially when work is not dynamic and the boys themselves are not involved in physical or spatial movement.

While girls may feel bored in an unstimulating class, their brains do not enter the same rest or boredom state neurologically that boys’ brains do. Because of a Y-chromosome created rest-state difference, even when bored, the female brain more often retains information and directions, pursues the learning goal in front of them, and can appear attentive; meanwhile the male frontal and other lobes empty of blood flow (“go blank”), and the boys miss the lessons, directions, and learning.

Crespi is aware of this brain difference. Its holistic approach to boys includes significant teacher training in how to keep boys’ brains activated out of the rest state and how to read signals that the rest state is occurring--in boys’ eyes and demeanor--so that “brain breaks” and other boy-brain-friendly innovations are used to keep the male brain learning and active.

Difference in Biochemistry

Male and female molecular differences in hormonology (*brain chemistry*) have been noted by many scientists, including Dr. David Geary at the University of Missouri. Over the last forty years, he and his team have studied the impact of evolutionary biology on sex and gender. Among the brain chemistry differences they have found in sexual dimorphism is the *testosterone/oxytocin* difference.

Boys and men have ten to twenty times more testosterone, an aggression chemical, in their bloodstreams and brains than girls and women. Girls and women have more estrogen, progesterone, and other chemicals well known to us all, but also have more of a lesser-known chemical, *oxytocin*, which is the primary human bonding chemical.

Bonding and attachment are one of the most crucial human functions for life-success, but boys and girls tend to bond differently. Females tend to bond more via verbal empathy and less physical aggression; males tend to bond less via protracted words-for-feelings and more via rough and tumble play and quick bursts of physical aggression. As Geary has noted, these sex-different bonding mechanisms fit our hormonal neurobiology.

I have named the way that males bond *aggression nurturance*. This is bonding that includes aggression (aggression is not violence, it is healthy assertiveness) rather than avoiding it. Traditional schooling punishes aggression nurturance our males use even though that kind of nurturance is a primary driver of resilience-building in all human beings.

To be successful with boys, an environment like Crespi’s must absorb and direct male bonding without letting it go too far. This means teachers and staff learn to enjoy and direct this kind of bonding while also teaching boys how to control aggression so that it does not become violence (bullying). At Crespi, the distinction between bonding via

aggression nurturance and bullying/violence is very clear to the boys, and the system works well to direct boys away from bullying while maximizing male-type bonding.

Exceptions to the Rule: The Sex and Gender Spectrum

In discussing these six differences, I used words like “tend to” rather than stereotyping all girls or boys a certain way because there are exceptions to every rule. Some boys and men use words better than some girls and women. Some boys dislike rough and tumble play. Some boys multi-task as well as their sister or mom. Some boys are highly organized. Some boys control their impulses better than others around them. In sex and gender neuroscience, we use a 1-in-5 protocol of exception/rule because medical and psychological fields must generalize to develop protocols and meanwhile, somewhere, in someone, there will be an exception.

At the same time, if you study millions of Johnnys and Suzies, you notice that the 1 in 5 exception rate is an *exceptions-prove-the-rule* paradigm. The fact that exceptions to a given scenario exist does not negate the rule; it proves it. The importance of bringing neuroscience into schools and communities like Crespi’s is two-fold: first, because the rules apply to all races and cultures (sex on the brain comes in on X and Y so it is shared by all people) making effective baselines for education and child development possible for all diverse children; and second, because Crespi understands the rule it understands the exceptions and can make room for integrating exceptions into baselines.

The boy who is already good at words, for instance, may not need extra visual-spatial help to organize and write an A paper, but many of the boys around him will. Because both the rule and exceptions are known, all students can work together toward best practices for all. Similarly, the boy who bonds best by moving around in rough and tumble play will be respected and encouraged in the system, especially because his kind of play builds resilience in others, and more sensitive boys who do not like rough and tumble play for bonding will be encouraged to try it (because of the resilience building) while protected from its excesses.

Keeping a holistic eye on all kinds of bonding and all kinds of minds is worthwhile for all children Dr. Alan Swaney, Crespi Vice Principal, told me. “I notice students can ‘get by’ without developing certain skills and resilience but then may eventually reach the limit of their ability. This is why cross-training in all forms of empathy and resilience can help future-proof an already talented student.”

In our own Gurian research among Fortune 500 corporations (See: Gurian with Annis, 2008, *Leadership and the Sexes*), we confirmed Dr. Swaney’s analysis: students, both male and female, who are isolated from typical “boy interactions” in boyhood can find themselves at a disadvantage when thrust into highly competitive workplaces later. The boy-friendly “rough and tumble” environment is not a bad thing but a good thing when handled properly.

Though Sex Is Binary, Gender Can Exist on a Spectrum

Because exceptions to rules exist, we refer to male and female brain difference as both *binary* (because there are only two options for sex in our molecules, male and female) AND *occurring on a gender spectrum*. While a binary (sexually dimorphic)

male and female provide the scaffolding for human experience, individuals can experience for themselves where they fit on a *spectrum* of gendered male and female.

I have called people in the 1-in-5 exception category (what others might call the “gender spectrum”) *bridge brains*. These male brains can often look more female than other males’ (and vice versa, female to male). In our popular culture, an extreme bridge brain is now called a *trans* brain. This trans brain will have 30 or more brain centers operating like the other sex’s brain.

It is important to note that *bridge brains*, *trans*, and LGB (lesbian, gay, bisexual) brains are pre-set *in utero*. In the matter of pronouns, in English, we call children “he” or “she” early in life because these pronouns accurately depict sexual dimorphism. Questions of “gender,” which is a social construct, will arise later in life, and arguments ensue at that point regarding the gender spectrum.

After adolescence (puberty), Bruce Jenner transitioned to Caitlyn Jenner, “he” changing to “she.” He had the wherewithal and resources to make this change. Children and adolescents who present with *gender dysphoria* (discomfort and depression caused by trauma or other factors and linked to sex-on-the-brain) may also wish to change their pronoun.

From my brain-based perspective, these children are bridge brains identifying in a gender nonbinary way for reasons of dysphoria and then experimentation. Most gender dysphoric children who ask for a different pronoun during childhood or early adolescent end up in later adolescence returning to their original pronoun, but not all. They are exceptions to the rule.

In the wake of this science, we must create effective systems for *all people* because all people, including gender dysphoric children and adolescents, are *male and female* at the level of sex; simultaneously, they are engaged in social experimentation with bridge brain categorizations such as *gender fluid*, *gender nonbinary*, or “on the gender spectrum.”

The “all” then “some” categorizations are important for systems because *sex* is not thrown out by the brain when *gender exceptions* are explored. Neither sex nor gender is a zero-sum self-evaluation. They exist together in the psyche, one as bedrock and scaffolding, and the other as response to depression and search for exceptionality.

All of this is important to Crespi and to any school because the school must account both for the rules and the exceptions. At a boys’ school like Crespi, the evaluator confronts a two-fold question:

1) does the school understand boys so well that the school system is *boy-friendly* and thus inclusive of all boys at the level of *sex*; and

2) does the school train this boy-friendly system to be sensitive to, supportive of, and empowering of exceptional, sensitive boys, bridge brain, and *gender dysphoric* boys who may feel different or against type.

In my team’s assessment of Crespi, we find that Crespi does both and by so doing walks the correct middle path from a medical and science-based viewpoint: it is welcoming of gay boys, bridge brains, sensitive boys, and other males expansive of type, but meanwhile, adheres to “boy” (sex) at the level of training, pedagogy, and community development since all the boys, including the bridge brains, have male brains and, thus, need a system in place that is set up specifically to maximize the minds of boys.

Defining the Holistic Method at Crespi: Leveraging the Minds of Boys

To be a successful college preparatory school, Crespi must understand the minds of boys. Its holistic approach must include service to the male body, mind, heart, and soul. The school must be a boy-friendly environment focused on rigorous academics, expansive athletics, constant community building, resilience development, brotherhood, and respect for exceptionality. Especially given that boys are falling behind in traditional K-12 schooling and college around the globe, a high school's understanding of the minds of boys from a science-based, developmental perspective should lead to positive outcomes associated with holism.

And it does. Like Crespi, other schools around the world have leveraged the science of boyhood, and the minds of boys, for success. To find immediate online confirmation of this, please visit the www.gurianinstitute.com/success page on which you'll see schools and school districts that have provided data and outcomes; each has followed science-based programming regarding the minds of boys and girls, and some have taken a holistic approach to inculcating minds-of-boys training for each teacher and staff member, as Crespi has. Some of the data you'll see on our website pertain to coed schools and some to single sex. You'll find similar data in other studies and academic research.

In coeducational schools, data improvements include:

- *Rising grades and test scores for both girls and boys.
- *Safer environments for both girls and boys.
- *Greater respect for neurodiverse children in the schools as staff members and students understand sex, bridge brains, and the gender spectrum.

Among boys' schools, you'll find:

- *Better grades and test scores.
- *Lowered discipline referrals.
- *Less tardiness and absenteeism; and
- *Less bullying, suspension, and expulsion.

While the research base for GI training is available to all schools and communities, some systems do not pursue the neuroscience nor use it for school support; they perceive cultural headwinds that GI Model Schools and Crespi have wisely chosen to ignore, headwinds in the education sector that involve certain ideological groups popularizing extreme contentions about the use of sexual dimorphism in education. These extremists contend, without proof, that to discuss male/female brain difference (and, in Crespi's case, to remain an all-boy school) mean:

- 1) Diminished or erased gains for girls and women in society.
- 2) Marginalization of neurodiverse (LGBTQ+) children.
- 3) Stereotyping of boys into hypermasculine social norms and bad behavior.

None of these assumptions are true to the science, and all have been debunked by

schools and people working in the field, including Crespi and its staff. Furthermore, GI research shows that the three negative outcomes just listed are *more likely to occur in schools that lack teacher training in how boys and girls learn and grow differently*. Because Crespi combines its successful first principles in Catholic education with holistic training in sex/gender neuroscience, it expands its palette for what works with boys in our society and provides a model for others locally and nationally.

Systemic Tenets of a Holistic Approach to Boys

GI has isolated certain tenets of holism in boy-friendly systems that we used in studying Crespi.

1. Adaptation of tradition to the present: at Crespi, this would mean adaptation of tried-and-true Catholic principles of education to new challenges and technologies.
2. Values-development integrated into action: an emphasis systemically on character, enterprise, and meaning-development via values-driven social emotional growth and public service.
3. Fraternity: facilitation of brotherhood among boys that encourages moral and spiritual growth with empathy for diverse, shy, sensitive boys as much as more aggressive boys.
4. Safe and friendly work environment: this is important for faculty and staff so that retention of personnel is a systemic assumption rather than a constant tension in business planning.
5. Brain-friendly classroom environments: physical movement during class; group and pair work rather than mainly isolated work; spatial and visual stimulants especially around hard-to-learn areas; boy-useful motivation techniques; healthy room and desk set ups; brain breaks during block periods to keep boys out of the rest state; and other practical tools.
6. Reframing male aggression: holistic approaches to boys allow resilience-building male behavior in the way boys naturally relate and bond; adults do not overreact to (not hyper-discipline) male-centric activities that involve healthy hierarchy building, rough-and-tumble play, and touch attachment among boys.
7. Mental health protection: methodology for mental and emotional health that boys buy into, which often means not pursuing only or mainly traditional verbal methodologies (e.g., trying to get a teen boy to sit for 50 minutes in a small room to tell us what he is feeling) while pursuing other useful strategies for emotional connection such as peripatetic counseling (counseling while walking not sitting).
8. Technology use: to be holistic a system must decide how much technology is too much and how much not enough. The importance of tech in college and the adult work world is well established, thus, high school students in a college prep school like Crespi should master tech as much as possible. However, potential brain damage from excessive tech and device use is also well established. A school's constant re-evaluation of tech is necessary for

- integration of a brain-safe and holistic approach to child development.
9. Social issues integration: ongoing conversation among faculty and students around key issues of social health including racial equity, sex and gender equity, acceptance of other viewpoints, restorative justice, the democratic process, and social civility. A system cannot be considered holistic unless it is expansive of social issues in ways larger than a single issue or stereotype.
 10. Parent involvement: a holistic system enjoys substantial parent involvement including the training of parents and community members in the male brain; how boys and girls learn differently; what works and what does not work with boys; what parents need from the school; and how to generate emotional conversation with even the most reluctant boys.

These tenets provide an organized vision of holism in developmental systems. Their existence in the system can helpfully mark success in educating and maturing children.

Does Crespi Follow Through on Its Holistic Vision?

In our assessment of a Crespi education, we found little attrition, discomfort, or dissatisfaction, and on the other hand, we found a great deal of success across the board. As we'll explore with you now, we found substantial fidelity to first principles and tenets of holism. Where interviewees and observers in constituent groups indicated that a particular person could do better in the system—a teacher who had a bad day, a classroom that did not utilize strategies it could utilize, a student who made errors in behavior, an administrator who missed something important, a parent who overreacted to something—our interviewees and observers agreed that Crespi fulfills its promise of holism overall, and in a sustained way.

As primary author of this White Paper, having studied Crespi to varying degrees over the last fifteen years, I was nonetheless surprised by the general agreement among everyone I talked with about Crespi's success. After spending more than 30 years studying school systems, I admit to going into studies looking for "the big flaw." I want to see a system succeed, yes, but I am also looking for how it fails: this search is important to the scientific process, in my view.

But at Crespi, while my GI team and I only found specific small things that could be better, we found nothing that denied the tenets necessary for a holistic approach to boys. We also found agreement among all constituent groups that, as one teacher put it, "we have something special going on here."

Administrator Comments on Crespi's Holistic Approach

We asked Dr. Liam Joyce, Principal of Crespi, to distill why he thinks Crespi is a good school for boys. He said, "I can't tell you how many times parents come up to me at school events to say, 'My son never loved school before, but now he does. Thank you.' To me, there are multiple reasons boys and families come here, but if I had to pick one thing, I'd say, 'We help boys to grow up here. We give them the safety and time to do that.' Each boy can come into Crespi a boy and leave here a mature young man."

Robert Kodama, Director of Admissions, summarized his view of Crespi this way: "Because we teach, coach, and mentor the male body and brain holistically, we support boys and young men in growing all the potential aspects of themselves—physical, mental, emotional, social, and spiritual. Guys here sense how important this is—that we teach to *their* brains, to who *they* are. Their parents sense it, too."

Dr. Kenneth Foersch, President of Crespi, reiterated this point: "Our holistic approach to boys means each boy can feel supported to be *who he is*—not someone else, but himself. Meanwhile, we help direct him to higher callings and we listen to the boys emotionally and spiritually. We give them support to meet the challenges of a rigorous education. Our school size is such that no boy needs to get lost or marginalized here."

Dr. Alan Swaney, Vice Principal, agreed and added, "Teachers feel respected and free to experiment with new innovations, and the boys and parents generally like the innovations. I think everyone knows this is a rigorous place academically, a place with good values and ethics, a place that's open to moral conversation, debate; a place that 'gets' boys, a place where boys say among themselves, 'I can be myself here, this is a cool place.'"

Teacher Comments on Crespi's Holistic Approach

Dr. Sherry Brahim, who teaches Honors Chemistry and other STEM classes, told us, “The environment of Crespi feels like a family. It is a warm, inviting place in which parents and students are invested with teachers and staff. The school allows us to do things the way we want to in the classroom. We as teachers have the freedom to bring in our uniqueness to the whole.

“This sense of community innovation transfers to the young men with whom communication is essential. By being clear with the students on expectations and supporting them to meet our expectations, we hold the students accountable and the young men here like that.

“Especially with students who will be a challenge, it is important to build a relationship that shows I care about them. If I do that, they work hard for me—they don't want to disappoint me, because I respect and care about them. If they're struggling, I talk with them about what is going on in their lives, and work with them as part of a care team. Crespi has this kind of holistic approach built into it.”

Roxanne Lecrivain, who teaches French, confirmed the sense of innovation and relationship. “This is a great environment in which to be creative with the boys. We are not told by administration, ‘You can't do that.’ We are told, ‘If something is going to help boys learn, do it.’ This means I can personalize and customize my lessons for each group of boys which is very good because each boy is different in some ways, and each class brings its uniqueness.

“I remember a few years ago I had a group that didn't project their voices well, so I took them onto the sports field where they had to speak while ‘projecting well’ vs. not doing so and vs. screaming. They learned the difference. It was no problem to innovate with them.

“The class and school size here also connects with the holistic approach. If I had 30 students, I could not innovate and customize like I can here. Being able to know each student helps me help them--each of them--reach their goals.”

English teacher Nick Santoro told us: “To me the holism shows up in the time-honored Crespi traditions the school adapts to the times. Another is all boys' classes and environment, which makes teaching easier if teachers use boy-friendly strategies. And boy behavior is understood here. We don't overreact to aggression nurturance; we help boys manage and direct it correctly.

“In my classes, I give a lot of brain breaks; I give each student responsibilities and jobs. Three or four students collect the books, other 3 or 4 pass the books out. Giving jobs helps the boys get to know each other.

“Each of my classes has baseball bats, golf clubs, puzzles, and basketball hoops because I want the boys to be active learners. We do three-point Fridays, which is like a carnival game; we choose three classmates who can shoot, then after the game, everyone's engagement level rises. The people chosen constantly alternates.

“To me this way of teaching is holistic, inclusive, stimulating, and ultimately leads to best outcomes in learning and in life. The boys are learning, laughing, relating to each other, competing, preparing for tests, then doing well on tests. Boy-friendly

education should be, by its very nature, holistic, and Crespi, as a school, understands that.”

Parent Comments on Crespi’s Holistic Approach

Dr. Julie Elginer, a professor at UCLA, and her husband have two sons at Crespi. She told us, “We like Crespi’s culture for multisport athletes. Crespi nurtures them well in their early years and beyond. We also like the academic rigor at Crespi.

“Crespi is college prep—it helps students develop executive function skills, multitasking, time management, prioritization, two-by-two matrix (important vs. urgent), categorizing, synthesizing and making meaningful plan—these are things that UCLA and other colleges need them to know. Executive function is structured into the classes and lessons as well as the culture at Crespi.

“Through my sons I’ve seen that there is a place for every boy at Crespi. It doesn’t matter what they excel at, there is a place for each boy to bring his whole self to the school and environment, and to succeed. Crespi insists on accountability and discipline, holding the boys to behavioral standards, academic standards, character standards. As an academic with a critical eye, I can seek and find things to criticize at Crespi, but the holistic approach does work very well.”

Susan Lopez and Jeff Shinbrot have three sons at or graduated from Crespi. They told us, “One of our sons was not doing as well as we would have liked at a large middle school, then he came into Crespi and started doing well. He was a different person after first semester. By the time he graduated, he had boundaries, he was academically excelling, he saw the value in growing up well.”

Jeff said, “Crespi, to me, takes young boys and creates boundaries for them to be young men in the world. It is not fascist about rules, but because of the all-boy environment, and the good teachers, the boys grow up well.”

Susan said, “I love the size of Crespi, small classes. And I love how every friend my kids have brought over to the house is a young gentleman. Good, respectful, well rounded, kids. By sixteen if not earlier, the boys know how to act like young adults.”

The Shinbrot boys are Jewish, so I asked the Shinbrots about inclusiveness at a Catholic school. The Shinbrots’ answer was: “A Catholic education that is done in the boy-friendly way like Crespi does it—with character development, rigor, athletics, the whole thing—it’s great for boys who aren’t Catholic, too, like our boys. The religion is a topic for sharing and learning, not exclusion. Our Jewish sons love Crespi.”

Student Comments on Crespi’s Holistic Approach

We asked students if they liked school at Crespi, and if so, why. All the students we spoke with did like school at Crespi to varying degrees.

“Okay, *why* do you like school here?” we asked.

The various answers they gave are divided here into topic areas.

Brotherhood

“The brotherhood here. Everyone is welcomed here. We take care of each other.”

“Some days a guy is having a bad day, so we rally and help him. We’re a brotherhood.”

A freshman, said, “It’s not as cliquish here as at other places, and the seniors and juniors care about the younger students. This feels like a family.”

Self-Expression

“I can be myself here.” Every boy we spoke with said this, so we probed further. Some answers:

“I don’t have to put on a face or personality to impress someone else.”

“I don’t have to become someone else to impress girls. I can just be myself.”

“Boys understand each other, we can just be ourselves. We don’t overreact to each other.”

Class Size

This was another area most students brought up to us. Like the other topics, the answers were not prompted specifically; we just asked, “What do you like or not like about life at Crespi?”

“I was in a large middle school with 30 – 40 kids in a class,” a freshman told me. “The class size here is 15 – 20 and sometimes even less. This works much better for me.”

A junior said, “I felt lost in a large school, like I didn’t really fit or matter. Here, I matter.”

“My grades were really bad in middle school,” a senior told me. “I know part of that was my fault, but also, I didn’t get support there. Here, I get support and the teachers motivate me a lot. I get good grades here.”

Board Member Comments

Mary Beth Lutz, Principal at St. Mel School and Crespi Board Member told us, “Crespi meets the needs of the variety of boys. To me this is the biggest thing, it’s why I promote the school. It can serve boys who are already leadership material, but it also serves boys who have leadership potential but need help to reach that potential. To me, that’s every boy, or at least that is how I like to see every child: with potential that may need help coming through.

“Being principal at a middle school, I see the young boys falling behind more vocal boys and with girls—these are the guys who get lost, and whose potential can get lost, in a large high school or a coed high school. At Crespi, I see these boys, by the time they graduate, as class president, or captain of team, or doing mock trial, or leading in arts or theater—they find themselves because Crespi gives lots of opportunities to

become leaders, especially in other stuff besides one sport or one academic area.

“I think, also, sitting on the Board, I have another perspective that is helpful—I am working with the leadership in the school. To me, leadership is another strength at Crespi. Dr. Foersch, Dr. Joyce and the whole team sees itself as being in the business of serving boys and their families. This is very important and ensures that a holistic approach to boys is always going to be supported at Crespi. Crespi carefully interviews everyone it hires to make sure the teachers will fit this approach. There is leadership buy-in throughout the system.”

Realtor and Board Member, Jordan Bridges, an alumnus of Crespi (2010), told us, “Crespi mixes modernization with core teachings. It does this by updating robotics and sciences and increasing the black student union and culturally and technologically pushing limits to help young men from diverse groups to succeed in jobs and as men, and it does all this while teaching character development.

“I see this holism as a ‘full platform portfolio’ that combines tradition and innovation. Because the same pillars and values of the platform are shared with all students, you can feel it as you go through the halls and classrooms. You see modernization in the SMART boards, computer labs, robotics (the robotics blow my mind, we couldn’t have that in my time); you see it in media, broadcast journalism, broadcast arts, the Taiko program). The new creative arts area grows kids via writing, painting, too, not just pushing kids toward one or two professions, like a lawyer and doctor, but all possibilities.

“I also believe in Crespi because it is a family,” Mr. Bridges continued. “I experienced this as a student and now I see it as a Board member. The faculty is a big family; they share their care for young men with one another. These teachers really love these kids, want the best for them, and go out of their way to help them. The class size, especially for freshmen and sophomores, is great—it really helps everyone bond so that no boy will not be noticed or gets left out.”

Is There Racism or Sexism at Crespi?

Mr. Bridges is African American. Interviewed faculty members, administrators, and parents included Hispanic, Asian American, African American, Multiracial, and Caucasian. We asked representatives of each group if they saw racism at Crespi. The unanimous answer was “No.” An administrator said, “I can think of one incident where there was confusion about what was appropriate to say around a black woman, but the incident was not racism.”

When we checked with the black woman, our colleague, Dr. Glynetta Fletcher (who works in the LA Unified School District as a Diversity Principal), she agreed: “These boys will do impulsive things, things they see in movies or in the culture, they’ll imitate it and we need to correct them, help them, but racism is something beyond that. I don’t see racism at Crespi.”

In our outside assessment, these three factors appear to remove racism from the Crespi equation:

1. The Carmelite values and traditions which are inherently inclusive of all peoples.
2. Vigilance among staff, parents, and students to understand racial, ethnic, and religious dynamics in a holistic way.
3. The brotherhood built into the school culture that accepts and promotes everyone in the brotherhood no matter their race, ethnicity, or religion.

As Dean of Students, Tim Selby, told me, “Administrators, teachers, counselors, and peers at Crespi make it a point to correct behavior in which boys imitate social media memes and use racist terms from music they are listening to. Yes, there is racism and sexism in popular culture and freshman are especially prone to imitating it, but when they receive correction, the imitation stops at our school.” Tim agreed with our outside assessment of the three helpful structural factors (above) in Crespi’s school culture.

Crespi’s racial data is as follows.

American Indian/Alaska Native:	.2%
Asian or Pacific Islander:	7%
Black (Non-Hispanic):	6%
Hispanic:	19%
Multiracial:	17%
White (Non-Hispanic):	51%

To look at sexism, we asked all interviewees and observers, especially women on staff, women Board members, and mothers, what they saw at Crespi. Like their answers to racism, no one reported sexism except as imitations that needed to be corrected.

Susan Lopez, a Crespi mom said, “I was worried about sexism, frankly, before we signed our first son up to go to Crespi. I thought, ‘It’s a boys’ school, won’t the boys learn they are superior to girls and women?’ But when I talked to other moms whose boys had already been there, they told me the same thing I’ve now seen by experience:

the idea that boys in a boys' school are going to become sexist is just an old stereotype. These boys are respectful to women.”

When we drilled down on this topic, a female teacher, Dr. Sherry Brahim, told us: “What I see here is nothing systemic but I do see individual boys who are immature, especially as freshman; they don't understand how to act around certain women, or how to be respectful. They make a joke they think is funny, but a woman will find disrespectful. We need to mature them--which we do. The culture here supports women. It sees women as integral to the process of a boy's maturation.”

Dr. Joyce, Crespi Principal, echoed Dr. Brahim's developmental trajectory for the boys. “We have to remember: everything our boys are doing as freshman they learned somewhere else. It takes time and attention from all of us to mature them regarding areas of socialization with others in which they are vulnerable to making errors.”

Crespi has a broad mix of students racially, ethnically, religiously, and from a social-economic standpoint, with more than 50% of students on some financial aid. This confluence of various groups, including student and faculty diversity and women throughout the staff, allows the school to create a culture of positive identity, empathic resilience, and strength of purpose rather than racism or sexism.

Why a Boys' School?

More than one mother and father echoed the comment made by Ms. Lopez about her initial fear of a boys' school.

"As a mom I worried about a boys' school."

"I thought it would be 'boys will be boys' and all that."

"I thought my sons would miss out on developing their feelings because there aren't girls there."

"I thought it would be all about gender stereotypes."

At the core of these worries sits a fear that a son will not develop well-rounded emotional intelligence. Parents feared limitations on emotional development without girls present, and on the other hand, with, perhaps, too many boys present. Underlying this set of fears is often the concept that to have emotional intelligence development, boys need girls around them always or most of the time.

Crespi provides significant opportunities for interaction and socializations with girls: after school activities, clubs, and shared activities that create constant contact. Crespi, like other boys' high schools, is not a cloister of males isolated from the world. But even then, is it correct that girls and women are the only, or perhaps the most important, arbiters of male emotional intelligence development?

This question has been tested in gender research, going all the way back into the late 1990s. William Pollock of Harvard's Medical School noted in *Real Boys* (1998), "Boys have a different developmental tempo than girls. The difference shows up very early and continues through high school and into adulthood." Dr. Pollock studied boys' schools for emotional intelligence development and found them significantly effective in utilizing natural developmental tempos in boys toward emotional intelligence actualization.

His results have been corroborated by many researchers in the field, including Michael Thompson and Dan Kindlon, reporting their findings in *Raising Cain* (1999), Leonard Sax, M.D., Ph.D. whose findings are reported in *Why Gender Matters* (2013), and the Gurian Institute, *Boys and Girls Learn Differently* (2001, 2010), and myself, *The Minds of Boys* (2007). Even earlier in the 1990s, other scholars decided to study single sex schools and boys' schools.

Collectively, our research has determined:

*Both coed and single gender classrooms can teach gender stereotypes. These stereotypes are part of our social fabric and so we battle them on all fronts no matter the school.

*Meanwhile, some of the most successful people in the world went to single sex schools and these people know how to relate to women and men in the workplace; they also understand exceptions to rules.

*There is no evidence that spending time in a single sex or single gender school makes a person a bad spouse or leader who has no emotional center. Male emotional intelligence grows in single sex and coed schools if that intelligence is supported.

In the late 1990s, I met feminist researcher Patti Crane who put all this to the test by interviewing spouses of men who went to coed schools and spouses of men who went

to boys' schools. Surprising Crane and her colleagues: the spouses of the men from boys' schools reported better aggregate communication and emotional interaction skills in their husbands than did the spouses of the men who had gone to coed schools. Crane had gone into her research assuming the "gender stereotypes" argument would prevail and the boys from boys' school would make worse spouses. She got different results.

As she and I discussed her findings, we understood a hidden causation: because boys in boys' schools do not have girls around them constantly to do the emotional work for them, they learn to do that emotional work for themselves. Crane's findings, like my own, Pollock's, Sax's, and many others', have turned the "dangerous gender stereotypes" and "male segregation in boys schools makes for bad husbands" arguments on their heels.

Crespi is a boys' school that understands the need for emotional intelligence development. It focuses a great deal of its social and community capital in helping boys to develop social emotional maturity from the inside out, one boy at a time, in a safe community.

Is There Bullying at Crespi?

We asked every staff member, Board member, administrator, parent, and student we interviewed this direct question, “Is there bullying at Crespi, and how is it handled?” We asked the question this way to subtly assert that there was bullying there so that we could best gauge responses.

The results of this probing were unanimous: “There is little or no bullying at Crespi.” This surprised us, given that it is normally considered a social “given” that when boys get together in intense male environments, some bullying must occur, especially as older boys target younger or “weaker” boys.

Indeed, boys do target other boys at Crespi, but not with bullying (we define bullying as *repeated destructive action, whether physical, verbal, or emotional, in which power differentials harm the bullied*). The boys at Crespi use *aggression nurturance* with one another and, thus, do not need to bully. The following comments from various interviewees make the case for a distinction between bullying and aggression nurturance:

“What I see at Crespi is boys interacting like boys do, rough housing, aggressive, but that’s not bullying.”

“In my four years as a student here, I’ve only seen one incident of real bullying on campus, and it was handled immediately by Mr. Selby. But there’s lots of fun roughhousing. We challenge each other a lot.”

“The boys here challenge each other with aggression nurturance,” Dr. Alan Swaney, Vice Principal of Crespi, told us. “But they also practice empathy nurturance, and they understand the distinction. Part of how they grow here is understanding when to practice what and with whom.”

Rob Kodama, Director of Admissions, whose son went to Crespi, said, “When I first came here to work, I immediately saw guys hugging each other. I’ve been here more than 20 years and my son went here and we both understand the same thing: there’s rough housing here, but it is very emotion based, very deep, very loving. This kind of male emotional maturity development is hard to explain to people.”

Dr. Liam Joyce, Principal, gave an example, “Boys will flip each other’s hair playfully—some outsiders might even think it’s rough, but it’s really a form of emotional connectivity. Or a boy will hug a guy then smack him hard on his chest--what he’s saying without words is, ‘I care about you.’ This is not bullying. This is care and love that also builds resilience.”

Tim Selby, Dean of Students (also known as the Dean of Discipline) helped me drill down into the bullying question from his point of view. “The boys’ school environment here at Crespi understands aggression nurturance and teaches it--that is very helpful. For instance, in the first semester, I hear questions about specific behaviors from freshmen and their parents as both the boy and his parents are trying to figure out what aggression nurturance is. By about second semester of the freshmen year, the questions die down because kids and parents realize the resilience-building and love that is going on. Everyone figures out the social coding.

“This doesn’t mean there aren’t incidents or questions. If a parent comes to me and says, ‘My son is being bullied.’ We take this seriously. We study the situation. Both sides air their side, it turns out there has been something said, another boy responded, it was a personality conflict, including a potential personality conflict with a

teacher, or sometimes it is lack of communication that escalated. We try to talk about it with resilience in mind, and everyone involved having the floor to have their own voice.

“I think because the Crespi Man is so important here, and because we understand aggression nurturance and the way boys develop and need help to grow, we don’t have the bullying stereotype of the big kid picking on a little kid to hurt him. We mainly have both students going after each other and without the talking skills yet to say, ‘I don’t like how you are treating me.’ Bullying is a violent behavior not a nurturing one and we don’t allow that violence in this brotherhood.”

As outside observers, we find that while most of what happens at Crespi occurs in this category of aggression nurturance and resilience-building, the structure and brotherhood in the school is also well set up to handle bullying if it does occur. As the students, admin team, and Mr. Selby noted to us, “If there is an incident of bullying here, everyone gets on it very fast. We use it as a teaching moment, and if it warrants more than that, we can suspend a student. We don’t allow bullying at this school.”

Crespi Classrooms and Teaching Innovations

For Crespi to work, its classrooms need to be run by teachers who are dynamic, bond well with the boys, receive respect from the students, and innovate during class time to engage the boys in learning. Our Gurian Institute team observed Crespi classrooms multiple times to see where innovations did or did not occur. Some of the brain friendly innovations we looked for and found will resonate with the male-brain learning needs we discussed earlier in this study.

***Teachers moving around, not sitting stationary**, so that students see an object moving through space. This helps with right side brain activation and overall brain activation among boys. Many of the Crespi classrooms used this strategy during our observation times.

***Students are allowed to move around as needed** so that the student's cerebellum will remain active during learning and schoolwork. Without this cerebellum (the "doing" center of the brain) active during learning, the brain may go to a blank rest state. All the classrooms we visited did allow some movement and many teachers encouraged it.

***Competitive games, game theory, natural competition** to motivate learning and trigger increases in testosterone and, thus, dopamine that further activate learning. By competing together, male biochemistry activates the *striatum* and *caudate nucleus* in the brain's crucial reward areas. Many classrooms in our observations used competition and game strategies effectively.

***Use of spatial objects such as "ball toss review" or "hacky sack"** (when doing a verbal quiz, the speaker is thrown the ball or hacky sack). This allows for gray matter areas (where memories and knowledge are stored) to actively engage in the lesson. Some classrooms used this strategy very well.

An example: In Honors Grammar/Comp 1, Mr. Parlato tossed hacky sacks to students one at a time. Once they caught it, he asked a question about the content they were reading. As the brains watched the object move through space, they went on alert and their answers shined.

This simple strategy keeps a lot of brains out of the rest state—it keeps them engaged—and allows the brain to access hidden information that would not come up if the student is just sitting and listening to a teacher talking.

***Brain breaks every 20 – 30 minutes**. Standing up to do something together as a group (jumping jacks, "thumb wars," march around the room for a minute) re-engages the cerebellum and, thus, the rest of the brain.

All classrooms at Crespi allowed boys to get up and move if they needed to, but most classrooms did not employ brain breaks during the time we visited. This is an area where we would like to see an increase in teacher training: more targeted brain breaks in a block class of 60 – 80 minutes.

***Group Lessons, Movement Embedded, Everyone Participates**. As classrooms become communities, every student can find his own level and island of competence and be respected for who he is. Much of this happens in group work. In most classrooms, we found that kind of community.

An example: Mrs. Lecrivain, in Honors French 2, spoke to students in French most of the time, clarifying in English as needed while the class read a recipe that she had

written out in individual steps on strips of paper students took turns reading and translating. Once they finished doing so, she asked the students to work together to put the steps in order. Once they thought they had done that, she checked to confirm, then asked students to take turns reading a strip of direction in French. That became the task that they would do as they made the recipe together. She had brought all the ingredients and the students enjoyed making the dish.

All students were engaged in this activity--when one boy stood outside the cluster of students for a moment, she called on him to pick up one of the recipe strips and read it, which he did. She corrected pronunciation as needed and confirmed with each student that he understood what he was going to do. No one was left behind or left out of this lesson that united group work, physical movement, and class participation together strategically.

***Every student is called on at some point** so that every student must engage in the lesson, rather than only a few students dominating classroom conversation. This is important as research has clarified: students who are not called on often drift away. In many of the Crespi classrooms, the teacher worked hard to call on everyone.

An example: Mr. DeLeo in American Government walked around the room discussing elements of representative government and asking questions then requesting that each student elaborate his answer. Mr. DeLeo's movement around the class kept attention focused; several times, he threw a ball to students during the question-and-answer session.

Students laughed together, made a quick joke about something, then got back on topic quickly. As each student was called on, helpful spatial strategies were used, students felt respected and needed for conversation. Overall, they were engaged in boy friendly learning.

***Use of graphic organizers and other visuals.** The male brain is visual-reliant in many ways. At any given moment, it can need more visual than verbal stimulation because visuals increase verbal acuity and can assist with organization (e.g., graphic organizers). In many classrooms, teachers employed visual strategies, often on the laptop but sometimes up in the front of the room.

An example: Dr. Bengford in Junior Composition II asked the students to "draw a symbol for what this paragraph means." He then read the paragraph expressively and gave students time to create a symbol before asking, "What's Melville saying?" The use of the visual-graphic stimulant led to deeper discussion of a text especially for boys who were more visual or auditory than verbal.

***Lesson objectives and goals** displayed on the wall/whiteboard and/or online. Some of the classrooms had the agenda/assignments on the board where students could see them visually. In other classes, the agenda was present on the laptop so that students could refer to it there. In some classrooms, however, we did not see the agenda laid out visually. We would optimally hope to see the visual agenda in every classroom.

***Classrooms well organized, floors trash-free.** Crespi classrooms were clean and the classrooms well organized. Students appeared to take responsibility for their own part in keeping their learning environment healthy and safe.

***Bulletin Boards and Walls Display Student Work.** Many Crespi classes have some form of "decoration," usually inspirational posters, and in appropriate classes, student projects and writing assignments well displayed.

An example: English teacher Mrs. Lehnert posted Blackout Poetry by the students on the walls (students had drawn a picture that reflected the theme, mood, tone, or imagery of an excerpt from a story or poem). The poetry was printed on top of the picture, then certain words blacked out so that the remaining words formed a sentence that conveyed a message related to the picture and literature.

This assignment encouraged students to combine visual with verbal skills and included emotional intelligence development to create an artistic representation of learning. As this evolving art was displayed, it was admired by others.

***Novelty, relevance, real-world learning:** Several teachers helped students connect learning content to real life experiences, whether in technology, language, science, math, or literature and liberal arts. An example: Mr. Brown, in Computer Science, prepared students for an exam by highlighting vocabulary terms like *melatonin* and *blue light*, then asking students how the words relate to computer science (i.e., blue light can impact sleep). These are relevant topics for students who presently use technology throughout their day and into the evening. Students participated actively in the review session and used their notebooks to find relevant answers.

***Fidgets, Squeeze Balls, other tools for attention and focus.** Letting students squeeze nerf balls or use helpful fidgets can be useful for male brain focus and attentiveness because it keeps the brain awake and learning. Some classrooms used these tools, though we believe more could do so.

Mr. Selby's Algebra I class provides an example of the strategy: a student played with a tiny car eraser while he worked on his assignment. He rolled it around the edges of his computer and then worked on a problem...played with it for a bit...then worked on the problem. This fidget wasn't disruptive to the class, and the student was productive in part because he could use the fidget to help his brain concentrate.

***Clear explanations/direction; teacher speaks slowly, loudly, and clearly.** With boys especially, it can be important to be circumspect in instructions (not too many words or verbal lecturing) and make sure the students understand the instructions. Mr. Giffen, in American History, asked, "For those who didn't take the exam, where will I be this afternoon?" (the boys answered). "If you didn't turn in your project, how should I be getting those?" (the boys answered). Asking them and noticing whether each boy answered correctly was more effective than just lecturing/telling. Crespi teachers tend toward this important and helpful strategy overall.

***Hallways and classrooms allow community development through healthy male bonding,** aggression nurturance, and hierarchy development. In this kind of environment, boys feel respected as boys and best understand correct limits and boundaries for behavior.

We found boy-friendly innovations in pedagogy and culture in nearly every classroom and hallway in some way. The high percentage of strategies-use indicates staff buy-in to boy-friendly education, which is good for the students but also, even more subtle, one of the reasons the Crespi staff reports "this school is like our family."

As most or all staff buy into the school's mission and practice its innovations in tandem, the individuals in that system live out a school culture that is both boy and adult friendly. The adults respect, enjoy, and support each other in creating their culture and community.

Shared classroom culture. As noted earlier, nearly everyone we interviewed discussed Crespi community culture. Nearly every teacher and administrator said something like: “This school is cohesive because we support each other in trying out new things—the culture here gives us permission to experiment and innovate. This helps the boys innovate and experiment, too; as the boys create a boy community and culture that works for them, it is community we, as adults, also enjoy.”

Not every teacher is using boy-friendly strategies continuously. Some teachers default to desks in rows and to lecture formats that may leave students in short periods of rest states, distraction, and incomplete learning. While a certain kind of classroom is a shared community goal at Crespi, that kind of classroom is not present every moment of every day.

Fortunately, though, Crespi’s attitude as a pedagogical system is one of continuous improvement. The holistic nature of the school and its community constantly flourishes as the school assists everyone in the system with boy-friendly training and innovation.

Digital Life and Screen Time at Crespi

In *Saving Our Sons* (2017, 2022), I join my colleagues across the medical spectrum to suggest parents limit screen times in developmentally appropriate ways, including limiting most screen use on school nights to educational purposes, and keeping electronics out of bedrooms and away from family mealtimes. The American Academy of Pediatrics provided similar developmental guidelines for digital media here: (<https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/american-academy-of-pediatrics-announces-new-recommendations-for-childrens-media-use.aspx>). I have taken these guidelines further by suggesting no gaming for boys on school nights. I also suggest parents and teachers titrate screen time, gaming, and social media use, if necessary, based on parental answers to these three questions:

*Is he performing well in academic and personal achievement (cognitive development, including grades, test scores, etc.)?

*Is he getting at least two hours of exercise per day, including sports/athletics (if he is not in a sport, then self-motivated exercise); equally important, is he eating right for his daily growth (neuro-physical development), and sleeping nine hours a night?

*Does he have friends and activities (e.g., faith community, service work, athletics, Boy Scouts) outside of gaming/internet relationships, and does he relate well to various adults (social emotional development)?

If the boy is having difficulty in one or more of these developmental indicators, screen time may be a culprit, and family and school may need to be extra vigilant with screen and technology use. This kind of inquiry leads to a holistic approach to digital life and thus pertains to our study of Crespi: Crespi is a one-to-one school—every student has a laptop—thus, a great deal of the teaching in classrooms does happen with or near that laptop.

As outside consultants, we looked for laptops to be off some of the time and handwritten notes used instead. We also looked for manipulatives and kinesthetic learning to occupy some learning time. When teachers use digital technology all of the time, the student's brain does not inculcate lessons as well as it would via multiple modalities.

Overall, we challenged Crespi staff, our interviewees, and the parents to help us understand where Crespi fits in digital matters by asking, "Does Crespi use digital technology/screen time too much? Not enough? In balance?" Some respondents said, "a little too much," some said, "in balance," and no one said, "not enough."

The "a little too much" showed up in this student's response: "sometimes the teacher just lectures to what is on the screen," and a parent saying, "if Crespi used screens less at school, our kids could use more screens at home." Meanwhile, in general, everyone agreed that digital technology is important to use for college readiness, so a fine line must be walked.

One thing about which there was unanimous positive agreement was the new practice at Crespi of putting cell phones in sleeves at the front of the classroom as the boys enter. While some students reported to us that there are a few students who sneak a second cell phone into class, there is very little of that, they said. And the students

themselves agreed that not having a cell phone with them during class is a good thing. One student, a senior who remembers being allowed to have cell phones at desks in the past, said, “They’re just distracting—we learn better without them.”

The digital question will be with every school for the foreseeable future. GI suggests that Crespi provide training for teachers on how to invigorate more variety in teaching modalities away from the laptop, e.g., compelling students to take handwritten notes with laptops closed for a period of time; use of more physical movement in class, around every 10 – 20 minutes for a brief brain break (which would in itself diminish time spent staring into the laptop); and a challenge to students themselves to create kinesthetic learning modalities, including games and competitions, that can replace screens when possible.

Conclusions and Recommendations

Following our study of Crespi Carmelite High School, including its grounds, buildings, classrooms, personnel, student and parent community, GI concludes that Crespi is a premier educational institution in both the southern California area and, should it choose to provide itself as a model school, nationwide. Its holistic method of educating, mentoring, and growing boys has been well integrated by staff and students into each part of the school. Because of this cohesive vision and community, the school can serve not just one kind of boy but all kinds of boys.

While there are more boy-friendly strategies teachers can use, and while the literature and research on boys' nature and culture is always growing, Crespi is, quote fortunately, growing with it. Administrators and teachers at Crespi have shown significant interest in the growth and in up leveling training for any teachers who need it. Meanwhile, also fortunate--and a testament to the school's commitment--most classrooms and teachers are current with best teaching practices.

Perhaps most telling in support of the school are alumni and parent comments about Crespi. These constituent groups report boys having a safe place of rigor and challenge in which to developmentally grow from boy into man. In this safe place and safe system, boundaries are set and executed, love and service to others is inculcated, and relationship and meaning become the bedrock of a whole person.

It is our assessment that Crespi combines the best of the past regarding values and mission with the best of the present and future regarding science and technology. We recommend Crespi as a unique educational format for boys that we hope will become increasingly mainstream in the educational sphere.

References and Resources

These references and resources, listed mainly in alphabetical order below, comprise only a partial list of previous and current studies on the nature, nurture, and culture from a sex/gender perspective. For approximately one thousand similar studies going back decades, please access the Research page of www.michaelgurian.com.

First, some recent additions to the research timelines:

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