

Gender-Specific Learning Strategies Quick Tips - An Overview

(Source: Strategies of Teaching Boys & Girls Elementary Level – by Michael Gurian, Kathy Stevens, & Kelley King, 2008)

I. You can Move it, Move it! – Learning loves movement and some learners need to move to learn; it helps to establish the brain body connections that boys esp. need to improve procedural memory & to help them self-manage impulsive behaviours

Rational:

- Improve synaptic connections
- Develop corpus callosum
- Improve attention spans (naturally)
- Enhance learning via increases in circulation & respiration
- Reduce impact of negative stress on the brain and body

Key Brain Areas Involved:

- Basal Ganglia – structures inside cerebral cortex responsible for voluntary/well learned movement
- Cerebellum- regulates balance, posture, movement & coordination
- Frontal lobe- reasoning, emotions, judgement, & voluntary movement
- Motoneurons- movement neurons located within the brain stem & spinal cord + axons in muscle fibers

Suggested Strategies:

Quick Brain/Chit-Chat Breaks:

1. Spell or throw your name/spelling lists in the air. Mix it up with different body parts & incorporate music
2. Cross-laterals using their body parts, shakers, xylophones etc
3. Pass It Along or Squeeze if you please. Variation – funny face or noise
4. Hand Fidgets like bean bags, koosh balls, stones, rubber tubing, pieces of Velcro, furry fabric, pipe cleans, shaker eggs, Lego, modeling clay, finger puppets (Create a classroom fidget basket or a tickle trunk)
5. Standing Up – do round robin reading or test review standing up in various geometrical formations. Play a game of call and response
6. Do the Wave - do the wave (Whoop! Or Yesssss/Noooo) in response to questions or what/who I am questions)

II. A picture is a thousand words – current brain imaging research from Australia notes that when student’s right, spatial side of their brain is engaged in their learning, students are more adept at handling left-sided language problems; important to teach to both verbally dominant left side and spatially dominant right to improve overall learning of subject areas, particularly math. Relative to writing & reading, girls due to increase sensory intake will tend to use approx 25% more words than boys in their writing assignments. To help boys become more sensory and emotive with their written expression, it’s important to stimulate their visual pathways.

Rational:

- Visual organization of ideas 1st, followed by verbal output, gain in outline and organization of papers = grade improvements=increases in confidence & motivation
- Stimulation of mental imagery via the 5 senses translates into better recall of experiences, increase sensory detail and descriptive word choice = level playing field for boys
- Improved vocabulary and retention of new concepts; demonstrate comprehension via pictures & symbols
- Increases in parental involvement in student learning because of the “draw before I write approach,” which helps to engage parents in the home-teaching & reinforcement process

Key brain areas involved:

- Hippocampus – responsible for cognitive mapping
- R. Hemisphere – governs spatial thinking
- Corpus Callosum – information highway interchange site
- Supramarginal Gyrus – spatial meaning/movement guidance system
- Thalamus- sensory relay station
- Occipital Lobes- process visual info

Suggested Strategies:

- Graphic organizers
- Hierarchical organizers
- Conceptual organizers
- Sequential organizers
- Fitting organizer to task
- Physical Models
- Use of symbols & pictures
- Word walls, Integration of pictures & words (i.e. graphic recording & facilitation)
- Mental Imagery & visualization
- Incorporate less talk, sample lesson formats

III. Learner Intrepid – giving students self-made choice & control helps to empower and foster learner buy in. Novelty is necessary for learning to occur. Activating the substantia nigra/ventral tegmental areas in the hippocampus & the amygdala, the brain's learning and emotional processing centres motivates the brain to engage, explore & respond esp. when presented with the unexpected/new experiences. The above areas directly impacts – reading & writing

Key Brain Areas Involved:

- Reticular activating system- filtration system and decides what to attend or ignore
- Limbic system- deep brain structures which wide reach, involved in emotion, motivation & behaviour
- L frontal lobe- conscious thought control to enable focusing, prioritizing & problem solving
- Amygdala- sensory convergence alerts to danger & responsive to novelty

Suggested Strategies:

- Provide students with reading choices
- Select books with and for your students (i.e. keep this in mind relevant to your classroom & school library)
- Integrate reading & technology for girls
- Provide students with gender relevant choices in reading & writing
- Demonstrate discernment relevant to violent content in children's writing
- Create gender-friendly writing prompts & engage the students in this process esp. when preparing for provincial tests (i.e. Practice boring, non-relevant writing prompts). Incorporate a flip-it mentality

IV. A Community of learners – learning potential is enhanced and maximized when students collaborate due to skill acquisition in problem solving, tolerance for points of view, knowledge review, learning strategies, idea sharing/creation, think aloud, rehearsal and reframing, brainstorming, debating, developing mind maps, empathy, shifting points of view, questioning tactfully, and world understanding and perspective.

Rational:

- Motivational factors associated with social interaction
- Social competence best single predictor of behavioural success in adulthood
- Proactive way to promote retention & positive mental health
- Re-energize brain
- Enhance focus and retention
- Incorporate movement with peer interaction and support

- Promotes inclusion and a positive school culture
- Fosters creativity & problem-solving
- Builds resiliency, stress management & coping skills
- Increases academic performance

Suggested Strategies:

- Focus on team building strategies & activities (i.e. Create a classroom team building charter based on beliefs/group vision for the year, reward with points or pennies for “catching” pros-social or positive life skills
 - Pointers – safety 1st, clear rules & expectations for each challenge area, focus on working together & mutual support, create cheerleaders, blend of cooperation & friendly competition, adapt the challenges according to ages & abilities, praise examples of + sportsmanship and life skills, be cognizant of rescuing/creating dependency, be mindful to debrief the team building challenges afterwards
- Read in literature circles – focus on choices, discussions & interpretation; create meaningful roles for participants (artist, word watcher/smither, lead facilitator, real world connector, dictionary diver)
 - Pointers – brainstorm group participation qualities for effectiveness, discussion etiquette, reflective questioning practice, discussion guidelines, discussion idea injection, gender-specific literature circles
- Study groups – focused group charged with reading, writing, and thinking critically about an action-driven topic/real world issue. Mix up and explore gender-specific vs. co-ed groups. Access for best practice.
- Vertical Mentoring (i.e. classroom buddies – partner reading, shared writing, cooperative project/craft, pen pals, community service, field trips, research, board games, team building, inter-class parties/celebrations)

Brain/Chit Chat Breaks:

1. Meet Three People – shake hands of three people with similar characteristics, backgrounds, experiences
2. Musical Groups – Breakout round table discussion groups. Using lively music, have the students walk or dance around the room and when the music stops, take a seat at the nearest table talk discussion group
3. Telling Yarns – Give each child a piece of yarn (toilet paper is also a good substitute); let them decide the length & have each student tell a story about themselves while wrapping the yarn or toilet paper around their fingers or hand.

4. We're Different, yet alike – Split up into dyads. Give each pair a piece of paper with a large Venn diagram. Have them draw/write/both on the diagram to show how they are alike or different. Share with class.
5. Classroom Quilt – Give each student white 5x5 inch paper and colored 6x6 piece of paper. Have each person illustrate something or importance to/about themselves on the paper. Mat it on the colored paper and mount all the matted squares together on Bristol board, poster paper or butcher paper to form a quilt portraying their classroom community. This same activity can be done using felt, glue and a volunteer parent to sew all the squares on a larger piece of quilt fabric.

V. Heart of the Matter: create valid connections between the learners and the content, esp. relevant for boys who are more at risk to disengage and become defiant, oppositional and for girls to disengage and become passive, placid learners. Foster real connections to real things. Discover ways to nurture the nature, their innate sense of purpose of meaning for life by accessing their inner resourcefulness, talents and attributes.

Key Areas of Brain Involved:

- R. Ventral Striatum – brain region responsible for risk and reward assessment (critical to task motivation)
- Oxytocin – bonding & pleasure neurotransmitter; more in females
- Angio-Vasopressin – neurotransmitter tied to inter-male aggression, territoriality, bonding and persistence
- Limbic System – deep interconnected brain structures associated with emotional bonding, motivation & behaviour
- L. Frontal Lobe – conscious thought control needed for attention, prioritizing & problem solving
- Reticular activating system- brain stem cells acting as control center for attention, motivation, self-control, information learning & processing

Credo to Teaching with Meaning:

- Real world content connection
- Conscious teaching relative to learning and gender style/needs
- Learner-centered teaching
- Student generated learning projects
- Students & teachers take responsibility for creating a positive, safe culture for lifelong learning
- Call on one and all

- 360 degree assessment portfolios (feedback from teachers, students, coaches, parents and self)
- Each student generates their own individual growth plan (i.e. learning goals, plans, strategies and action plans for success)
- Individually assess student progress based on all of the above inputs relative to natural talents

Suggested Strategies:

- Project based learning – connect student interests and purpose to school curriculum and demands/rewards of real world; students doing and learning via extended projects
- Social action projects- ignite a passion in a social/world cause whereby students experience strong emotions when they see or learn of a world/social problem
 - Resource Sites – www.dosomething.org, www.earthdaybags.org, www.epa.gov/kids/, www.uwex.edu/erc/gwah/, <http://teams.lacoe.edu/documentation/projects/windoes/care.html>, www.servicelearning.org/
- Kids in the Spotlight –
 - Vertical mentors
 - Publish student works
 - Podcasts
 - School assemblies
 - Power of one
- Competition to Build Relevance
- Simulation Activities
- Technology to Simulate the Real World
- Real Life Scenarios
- Culminating Projects
 - Letters
 - Public Service Announcements
 - Interviews
 - Student Newspapers
 - School Improvement Projects
 - Documentary Projects
 - Social Action Projects

VI. Creative Learning – resorting to quick fix/magic bullet solutions to turnaround standardized test scores has resulted in severe cut backs to critical arts-based programs and/or curricula in school programs. No Child Left Behind educational law (in the US) for example has

resulted in 71% of the nation's school districts to reduce instructional time in history, music and the arts to free up time for more reading and math.

Rational:

- Arts enhance process of learning
- Nourish integrated sensory, attentional, cognitive, emotional & motor capacities (all of which support our learning potential)
- Serve as a critical brain developer
- Arts support the development of aesthetic awareness, cultural exposure, social harmony, creativity, enhanced emotional expression, respect for diversity
- Improved right and left brain connectivity particularly if exposed to music between 3-8 years of age
- Musical study & development best pursued in early puberty; direct links demonstrated between literacy performance and music lessons
- Performing arts stimulates vestibular system via movement, helping children to be creative, gain mastery, change perspective & practice social skills
- Exposure to the visual arts and graphic mediums enables problem solving, critical & creative thinking, facilitates visualization and playful actions

Key Brain Areas Involved:

- **L. temporal lobes** – critical to math and music. Correlations between music making and spatial awareness & problem solving establish
- **Nucleus basalis** – midbrain; emphasis on emotional meaning to auditory input and research suggests music enhances emotional awareness
- **Primary auditory area** – hearing reception; thicker layer four of auditory cortex of accomplished musicians
- **Reticular activating system** –balance and harmony center; tied to other systems involved in learning, self-control, inhibition, motivation. Processing, information learning and attentional areas tied to neurons in this region
- **Occipital lobes** – visual input & imaging; color recognition & vision control
- **Parietal lobes** – sensory discrimination, spatial orientation & perception

Power of Music in Learning and Wellness:

- Transitional Music – aids in creating a safe container for change (similar to a transitional object preschool children use when changing environments or encountering new people or situations)
- Mood Elevators – upbeat music can transform negative moods or mental states into more positive, pleasant ones

- Masking of noise and distractions – classical, ambient, environmental or white noise works well to mask or cover up distracting sounds that can take away from concentration during the buzz of small group work & improve engagement for those when silence or concern over other’s hearing their input is a factor in participation
- Energy & Motivational Enhancer – employ music to help encourage children to move with more efficiency and focus
- Closure - use music to frame time needed to complete required tasks, or bring end to a day or week; helps to foster a sense of community, fun and positive feelings/mindset

Suggested Strategies:

- Focus on musical arts – listening, playing, singing/chanting, composing, arranging, & music reading
- Employ songs that promote learning- songs to teach phonics, as a pneumatic device, entrain oral reading skills, integrate to educational subject content, children’s song remakes similar to twisted fairytales Resources: (i.e. www.debfourblocks.com) , “The Vowel Family Song,” by Cathy Bollinger(Alphabet Jam Album)
- Use technology with music
- Focus on visual arts
- (i.e. Kidspiration)
- Technology & visual arts
 - Graphic organizers(i.e. Kidspiration)
 - Drawing & painting on the computer(i.e. Kidpix & Adobe Photoshop)
 - Multimedia (i.e. Hyperstudio, PowerPoint)
 - Digital skills & movies
- Performing arts – dance/creative movement, drama, directing, choreography, kinaesthetic activities, improvisation, plays, mime, musicals; integrates well across curriculum Resource: Jeffrey Wilhelm’s “Action Strategies for Deepening Reading Comprehension,”
- Create a music library or playlist for multiple uses/contexts
- Devise a improvisational music box of basic percussion instruments to add to you tickle trunk
- Meet & greet songs + farewell songs
- Dance/move to transitional lessons/activities during the day
- Compose music and lyrics to support learning in various subject areas across the curriculum

VII. Heart & Soul of Teaching – (Fostering Intentionality in Education) “I’ve come to the frightening conclusion that I am the decisive element in the classroom. It’s my personal approach that creates climate. It’s my daily mood that makes the weather. As a teacher, I possess a

tremendous power to make a person's life miserable or joyous. I can be a tool or torture or an instrument of inspiration. I can humiliate or humour, hurt or heal. In all situations, it is my response that decides whether a crisis will be escalated or de-escalated or a person humanized or de-humanized" – **Source: Teacher & Child, Haim Ginott**

Rational for Student-Teacher Bonding:

- Raise self-esteem
- Create caring learning community
- Promote academic growth
- Best predictor of student effort and engagement in school
- Significant factor in overall academic & behavioural success

Characteristics of + Student-Teacher Bonding:

- Creates a sense of belonging & connectedness to school community
- Fosters a sense of autonomy & self-determination
- Competency and confidence is nourished
- Warm, close communications
- Encouragement & praise
- Appreciation & respect for learning style (i.e. Resource – www.drrobertbrooks.com)

Key Areas of the Brain Involved:

- **Oxytocin** - enables trust; high levels foster resiliency to stress and social phobias
- **Vasopressin** – male equivalent of oxytocin, located in the ventral pallidum and associated with social bonding with males. Males tend to bond via contests or hierarchical jesting which teachers can tap into to their advantage to foster male connectedness
- **Dopamine** – produces rewarding and sometimes addictive effects of sex, food, drugs/alcohol, video games; same pathways stimulated during and after pair-bond formation
- **Limbic System** – connected structures associated with emotive response (i.e. hypothalamus, amygdale, thalamus, fornix, hippocampus & cingulated gyrus)

Suggested Strategies:

- Self-reflective activities – personal/professional journaling/sketching/poetry/story writing/post cards to students/parents
- Capture children's hearts - rigor, relevance, relationships (3 R's) – M. B. Flippen

- Nurture self-esteem – “strengthening a student’s self-worth is not extra-curriculum that siphons time from teaching academics; if anything, student self-belonging, security, & self-confidence in classroom provides the scaffolding that bolsters the foundation for enhanced learning, motivation, self-discipline & caring.” (Dr. Roberts Brooks)
- Risking taking – personal disclosure re: teacher risks taken; foster sharing of risk taking stories and incorporate trust exercises into your classroom environment
- Take an intrinsic interest in those with “true,” disabilities by:
 - Increasing your awareness & belief in the child’s innate abilities
 - Convey the highest possible expectation for the student
 - Create opportunities to connect with the child one- on- one & recognize their power
- Looping – teacher moves with students to the next grade vs. transfer to new teacher at end of grade
- Mentoring – provides consistent support, guidance & concrete help to student in need of positive role model
- Collective visioning for the year (all staff)
- Bonding investment with students (1st two weeks of new school year)
- Interest inventories or ice breaking activities during 1st two weeks
- Student-teacher extracurricular activities throughout year
- Disciplinary policies that encourage and reinforce mediation
- Active listening to student concerns & perspectives
- Collaborative relationship & transparent communications with parents

VIII. Character Education - teaching and modeling through your actions & words each and every day with a plan to foster personal civic values among all school community members; ongoing, long term effect; fosters the best that each student can be in the school community

Rational:

- Brings out the bestCreates a pervasive sense of “ this is how we are at this school, when the integrity is woven into the school fabric
- Inward motivation to do what is intrinsically right, regardless
- Enables right choices relative to life decisions
- Integration of the arts, service projects and positive, enriched school cultures facilitates character education
- Sustainable teaching practices foster character education via teaching, example, learning & practice as well as via the school’s demonstrative ability to maintain a clean and safe physical environment, + modeling and promotion of character education from both

parents & teachers, & the creation of meaningful ways to contribute to the school & larger community

Key Areas of Brain Involved: (Knowing, Feeling & Choosing to Act)

- **Cerebral cortex** – role in memory, attention, perceptual awareness, language, consciousness & thinking
- **Frontal lobe** – arranges information, planning, problem-solving, good judgement, language production & attention
- **Limbic system** – deep interconnected structures responsible for emotion, motivation, & behaviour
- **Right ventral striatum** – needed for risk & reward assessment; summon task motivation

Resources for character education in the classroom – www.charactercounts.org, www.giraffe.org, www.character.org, www.corland.edu/character

Anti-Bullying Programs & Resources – [www.ccsd.k12.co.us/dist info/](http://www.ccsd.k12.co.us/dist%20info/), www.hazelden.org, www.nwrel.org/request/dec01/school-wide.html, www.cfchildren.org/strf/strf/strindex/, www.thekindnesscampaign.org, www.incredibleyears.com/

Suggested Strategies:

- Praise for effort as much as ability
- Devise a personal mission statement and help your students to do so as well
- Develop a classroom code of ethics
- Classroom character asset poster projects
- Schedule regular classroom and/or peer support meeting in the form of a class sharing circle
- Help students identify charities or internal school support projects that they could collect donations or raise money for or engage in local clean up, adopt a highway, or weed a garden projects
- Advocate for both school recognition of academics and character (if one is in place)

IX. The Art of Collaboration- influenced by factors like parental work responsibilities, language & culture, parent/child inclusiveness, parent school perceptions based on their own early school experience, belief/ value system; trust transference from home to school is critical to ease of child's school adjustment and transition. High levels of parental involvement translate into good grades/academic success. school enjoyment & participation. Communication – open, direct, ongoing & cordial is a foundational key. This is the most important variable in fostering strong collaborative relationships between home and school life. Effective communications is built on clarity of your purpose relative to communication which could include:

- Informing
- Follow-up
- Asking for help
- Sharing information
- Informal exchange
- Active listening
- Know your audience
- Enable & support the chosen the channel (i.e. Clearly site the communication channels/methods available to the family)
- Consideration of gender – based communication strategies
- Dealing with diversity pro-actively (understand the family composition, challenges & strengths related to culture, language, socio-economics, race, lifestyle); take a strength-based approach as best as one can
- Using technology (Resources: www.blackground.com, www.fhs.net/HFSWeb.nsf/Home, www.egroups.com, www.lightspan.com/, <http://family.go.com/Features/family?1998?08>)
- Use E-mail
- Establish realistic homework policies and expectations in collaboration with parents & students (Resource: Teachers Involve Parents in School work(TIPS) Interactive Homework – www.csos.ihu.edu/p2000/tips/TIPSmain.htm, www.smartboysbadgrades.com/smartboys?badgrades.pdf, www.nea.org/parents.homework.html)

Obstacles to effective communications may include:

- Time constraints,
- Work commitments
- Language barriers
- Transportation issues
- Family compositional issues (lack of support)
- Socioeconomic challenges
- Status
- Stereotypes related to culture, belief systems

Suggested Strategies:

- Foster a family inclusive school climate and structures
- Afford families with Subject related mastery lists for each grade level
- Develop a parent resource center at your school

- Set up a classroom web site and parent page
- Create a homework hotline for students and parents to call re: forgotten/missed assignments
- Encourage parental involvement via presentations or demonstrations re: specialized skills/knowledge
- Send home weekly folders of student work, monthly calendars of special events/class newsletter
- Devise a parent-help wish list (i.e. good, services parents could assist with)
- Practice an open-door, open-mind policy relative to your classroom
- Be explicit relative to how parents can help and seek out their assistance with certain activities when needed