

Seminar Program

- 7pm Registration and Book display
- Purchase drinks or food if you wish
- 7.15 Welcome and introduction
- Presentation
- 8.15 Break – book display or purchase drinks
- 8.30 Resume – questions
- Presentation
- 9.15 Lucky Door Prizes
- Questions
- 9.30 Finish

Gifted and Underachieving

Presented by

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Columbus Group 1991

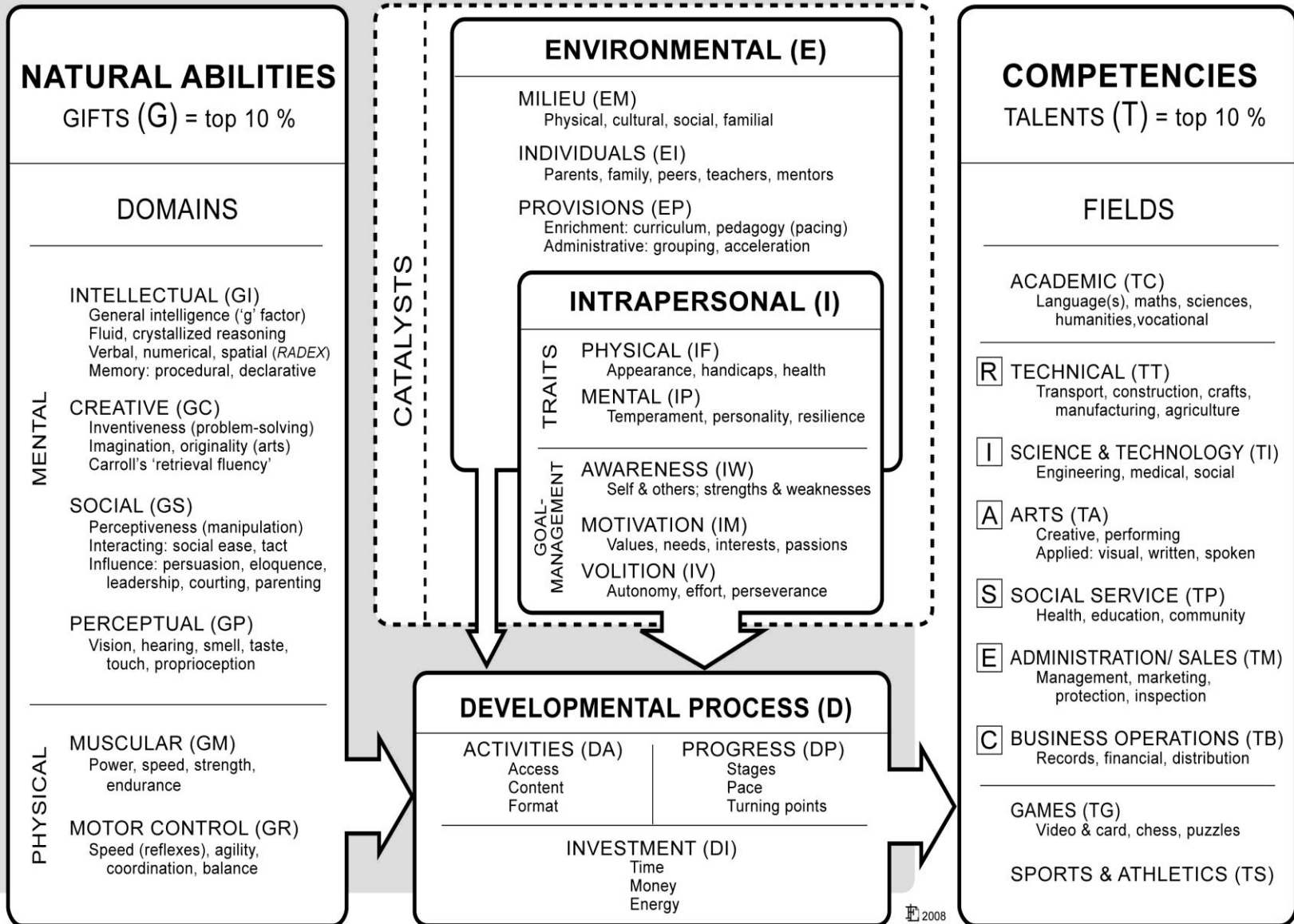
Giftedness is Asynchronous development in which **advanced cognitive abilities** and **heightened intensity** combine to create inner experiences and awareness that are **qualitatively different** from the norm.


This asynchrony increases with higher intellectual capacity.

The uniqueness of the gifted renders them particularly vulnerable and requires **modifications in parenting, teaching and counselling** in order for them to develop optimally.

Gagne's DMGT (2008)

CHANCE (C)




- 
- Some have estimated that the percentage of students with high ability who do not achieve is as high as 50% (Peterson, J. 1993)

UNDERACHIEVEMENT

- DEFINITIONS
- *Underachievement is a discrepancy between the child's school performance and some index of his/her actual ability, such as intelligence, achievement, creativity scores or observational data* (Davis & Rimm, 1994, p.281)
- *Underachievement is content and situation specific and is in the eye of the beholder,* (Nordby, 1998)

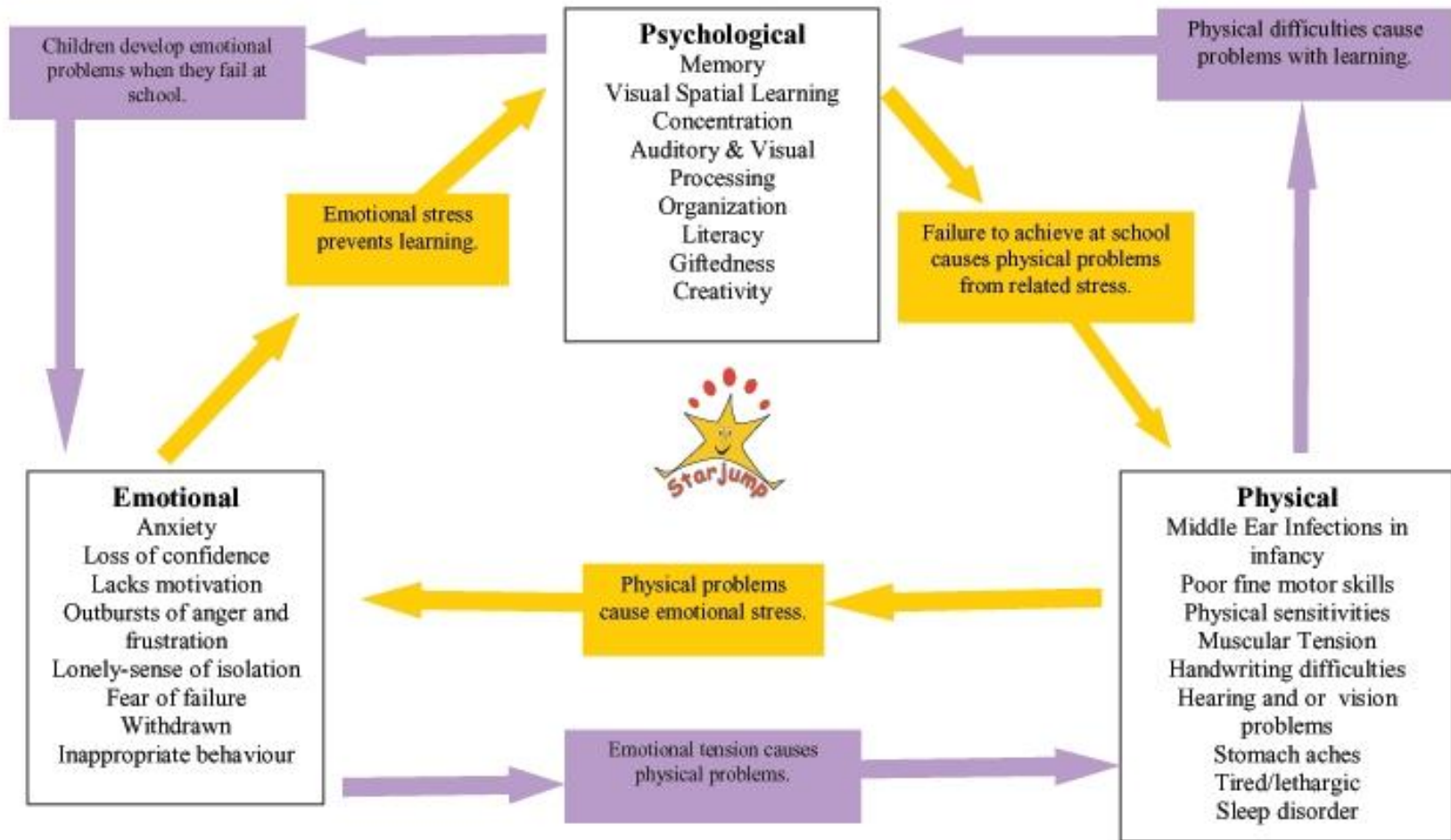
- *Underachievers are made not born. It is the child's choice to underachieve.” (Lewis, 1988)*
- *Never take away the thing or things that a child loves and succeeds in. (Lewis, 1988)*
- *Gifted students underachievement is a way to express either a need for attention or a need for control over a situation.
(Colangelo & Davis, 1977)*

- 
- *Underachieving gifted students are reported to attribute success to ability and not see the relationship to effort. (Clarke, 1997)*
 - *The central characteristics which distinguishes achievers from underachievers is an internal locus of control, the sense that children can effectively change their academic outcomes by effort.(Rimm, 2002)*
 - *Whitmore talks about underachieving schools*

Factors influencing Underachievement

- Co-existing conditions
- Gender Ethnic or socio-economic group
- Environment
- Motivation

BREAKING THE CYCLE OF LEARNING DIFFICULTIES



Some co- existing conditions

- Visual processing problems
- Central auditory processing problems
- Sensory integration issues
- Retained primitive reflexes
- Diet and gut problems
- Neurological problems -Executive functioning problems such as ADHD
- Autism spectrum disorder – Aspergers
- Anxiety

Gender, ethnic or socio- economic group

- Girls
- Boys
- Indigenous
- Low socio economic

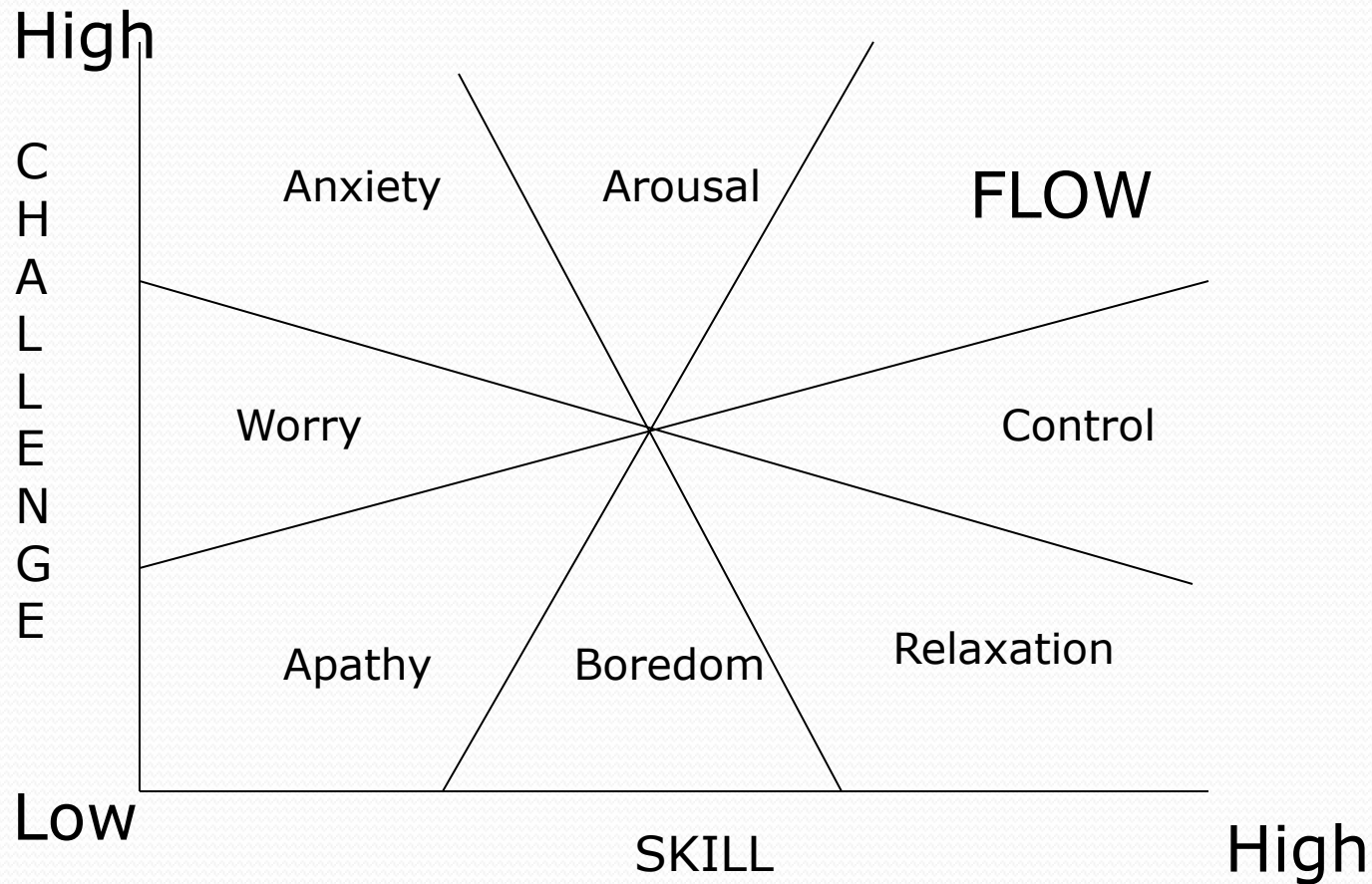
Why would a gifted child *choose* to underachieve

- Imposter syndrome
- Forced choice dilemma (Gross)
- Involuntary minorities
- Difference eg. Early readers
- Unchallenging schoolwork/inappropriate curriculum

Distinction between boredom and learning

- 5 distinguishing features *The 5 C's*
 - *Control*
 - *Choice*
 - *Challenge*
 - *Complexity*
 - *Caring teachers*

FLOW IS - The quality of experience as a function of the relationship between challenges and skills. Optimal experience or flow occurs when both variables are high. (Csikszentmihalyi, 1990) (*chic sent me hi*)



Obstacles that prevent 'flow'

- *Lack of choice* over content and scope of assignments
- *Lack of challenge* to current skills
- *Lack of clarity*, both in the goals of student work and in feedback to performance
- *Lack of control* over the match between challenge and skill

Reduce the underachievement cycle

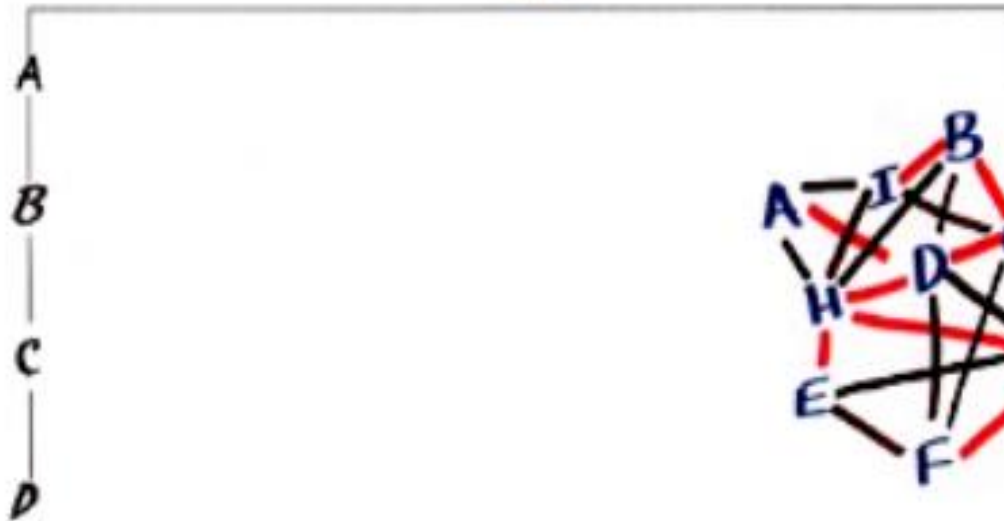
- Assessment
 - Of students' abilities, strengths, interests, problems areas by trained psychologist/ school counsellor
- Communication
 - ongoing between parents and teachers and the student
 - focus on reinforcing strengths /abilities
 - remediating or make adjustments for the weaknesses



Left
Word



Right
Picture



Space

Creative and Non Creative Thinkers

AHA Moments!!


- Distinctive pattern of brain activity - even at rest
- Greater activity in regions of right hemisphere
- Different brain activity in visual processing areas of brain
- Consistent with diffused rather than focussed visual attention
- Collect a broader range of inputs that trigger remote associations
- (Kounios, J. Jung-Beeman, M 2007)

Analytical processors / auditory sequential

- Learn persistently
- In quiet setting
- Bright lighting
- Formal seating
- Little or no food or drinks

Global holistic processors / visual spatial

- Require regular breaks
- Soft lighting
- Sound in the environment
- Seating informally
- Regular snacks and drinks
- Learning with peers
- Tactile activities
- Learn on different tasks at the same time
- Poor auditory memory

- 
- While many gifted learners may prefer holistic tasks, only underachievers appear to have relative performance deficits in analytic tasks as compared to holistic tasks
 - Perhaps this indicates more of a cognitive style than preference

Important implications

- Most **gifted students** with IQ ≥ 145 were **global learners**
Cody (1983)
- Most **underachievers** were also **global** and almost exclusively **tactile/kinesthetic** learners (Price, Dunn, Dunn & Griggs 1981)
- Only 12% **low achieving gifted** students prefer **auditory learning**
- 65% of **teachers** were **analytic**
- **Underachievement** may be learned through the struggle to cope with the psychological conflict of the classroom (Whitmore, 1980)
- **Self efficacy** is influenced by our past experience of mastery and the feedback from respected others (Bandura, 1986)



- "Illustrated by Buck Jones. Reprinted by permission from Silverman, L. (2002) Upside-Down Brilliance: The Visual-Spatial Learner, Denver: DeLeon Publishing."

Initial identification due to school based problems

- Has difficulty finishing tasks/schoolwork
- Has a poor sense of time, does poorly on timed tests
- Has difficulty with spelling and /or reading
- Loves books or learning but reluctant reader
- Has difficulty with times tables and /or computation
- Disorganised, poor listening skills and easily distracted
- Often thought to be lazy or disinterested
- Poor eye contact

Emotions

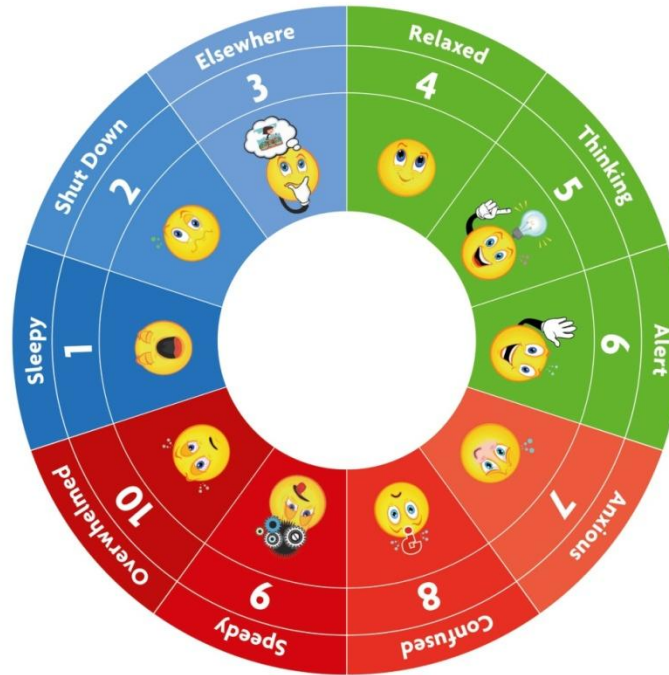
• Children with anxiety disorders are often
• especially children with ASD, who are
• often very sensitive to social situations

Does your child need to learn how to manage his/her anxiety? Is he/she a visual spatial learner? If so, standard talking interventions have limited value. A picture thinker approach is needed.

They can learn to manage their emotions.



Which ZONE are you in now?



BLUE ZONE

You can't learn if you are sleepy, shut down or your mind is elsewhere.

GREEN ZONE

You learn easily in the green zone when you are thinking, alert and relaxed.

RED ZONE

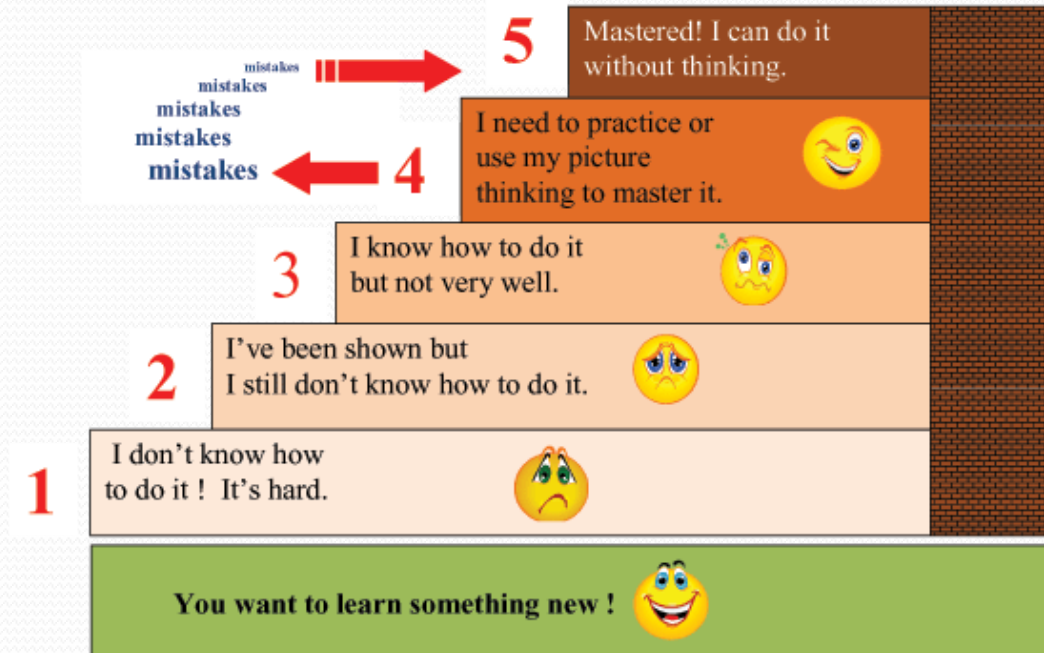
You can't learn if you are confused, speedy or overwhelmed.

Learning to handle mistakes

- Perfectionism
- Anxiety
- Risk taking
- Living with mistakes

Perfectionists don't like making mistakes.

5 STEPS TO LEARNING



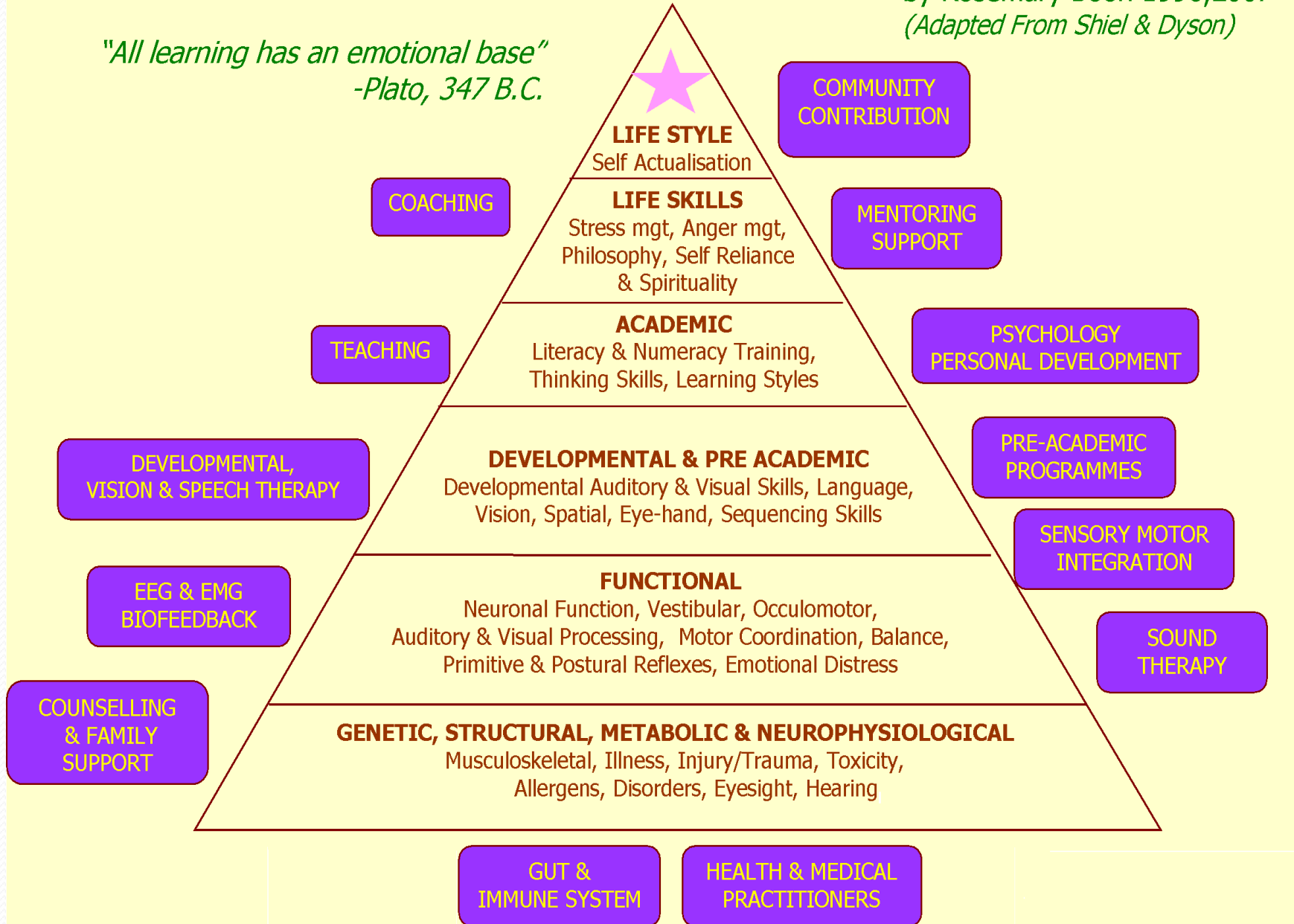
Break

- Please take the time to chat to others
- Look at the book display
- Resource sales table
- Purchase a tea/coffee or drink
- Raising Small Souls

The Pyramid of Development, Learning & Wellbeing

by Rosemary Boon 1996,2007
(Adapted From Shiel & Dyson)

"All learning has an emotional base"
-Plato, 347 B.C.



MAJOR RISK FACTORS

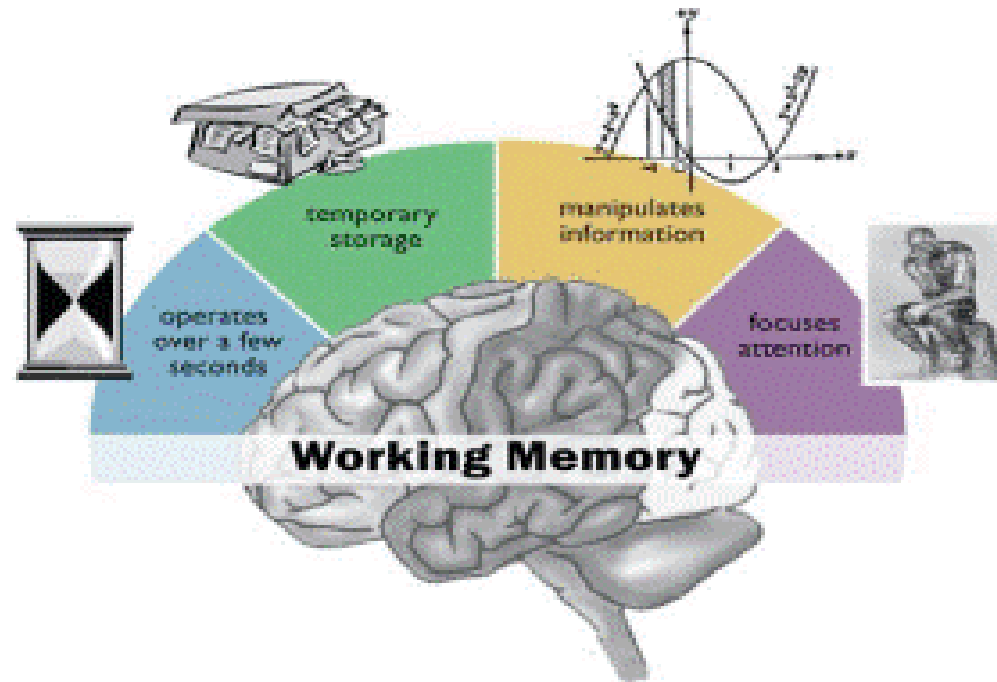
- Generally at least above average to high intelligence
 - Masking effect
- Scatter in IQ scores on WISC assessments
 - Depressed IQ scores
- Struggle as work increases
 - Underachievement
 - Low self efficacy, loose motivation, hate school, teacher's expectations/beliefs, poor behaviours
- Lack of accurate assessment of whole person including co-existing conditions-multi modal

HISTORY

- History of allergies or ENT problems in first 5 years
- Conductive hearing loss in early childhood
- Poor short term auditory memory
- Family member with similar style

Working Memory

- The term used to refer to a brain system responsible for temporarily storing and manipulating information.
 - It functions as a mental workspace that can be flexibly used to support everyday cognitive activities that require both the simultaneous processing and storage and retrieval of information.
- Tracy Packham Alloway - Educational Research and Resources Vol 1(4), pp.134-139, July 2006*



- Evidence shows that working memory is critical for academic success and has implications for:
 - focusing appropriately
 - shutting out distractions
 - complex thinking
- Managing working memory deficits in the classroom.
 - change the learning environment with good classroom strategies,
 - change the student with targeted working memory training.
- Researchers argue that working memory is a better predictor of school and work success than IQ

Identifying characteristics of Visual-Spatial System of Thinking

- Visual, not auditory
- Spatial, not sequential
- Holistic, not detail-oriented
- Focus on ideas, not format
- Pattern seeking
- Divergent, Not convergent
- Sensitive and intense
- Asynchronous development

Characteristics

● Strengths

- Thrives on complexity
- Loves difficult puzzles
- Fascinated by computers
- Great at geometry and physics
- Keen visual memory
- Creative, imaginative
- A systems thinker
- High abstract reasoning
- Excels in math analysis
- High reading comprehension
- Excellent sense of humor

● Weaknesses

- Struggles with easy material
- Hates drill and repetition
- Has illegible handwriting
- Poor at phonics, spelling


- Poor auditory memory
- Inattentive in class
- Disorganised :forgets details
- Difficulty memorizing facts
- Poor at calculation
- Low word recognition
- Performs poorly on times tests



- "Illustrated Brilliance: T

Upside Down Brilliance , Silverman 2002

ilverman, L. (2002) Upside-Down
lishing."



The figures to follow come from a random selection of 50 Gifted LD s

The figures to follow come from a random selection of 50 Gifted LD students we have assessed over the last few years.

Prevalence of Coexisting conditions

88% had 3 co existing conditions flagged

50% had 4 co existing conditions flagged

Understanding the big picture is necessary in order to get the right intervention.

Visual Disorders

76% had symptoms to suggest moderate to severe problems in the following areas:

- Visual processing
- Visual motor
- Visual perceptual
- Visual somatic integration
- Actual vision
- Visual strength and dynamic function.

Central Auditory Processing Disorders

Specific Language Impairment (SLI) and Specific Reading Impairment (SRI)

Visual Spatial Learning Strategies are essential for children with a CAPD.

ADHD or ADD

do not always have the same clinical picture together

ADHD or ADD

Treatment is highly recommended to avoid negative long term social , emotional and academic problems.

Over excitabilities

Intellectual
Emotional
Imaginational
Sensual
Physical

- 84% had an Intellectual OE.
- 66% had 2 OE's
- 30% had 3 OE's
- 22% had 4 or 5 OE's

Sensory Integration Profile

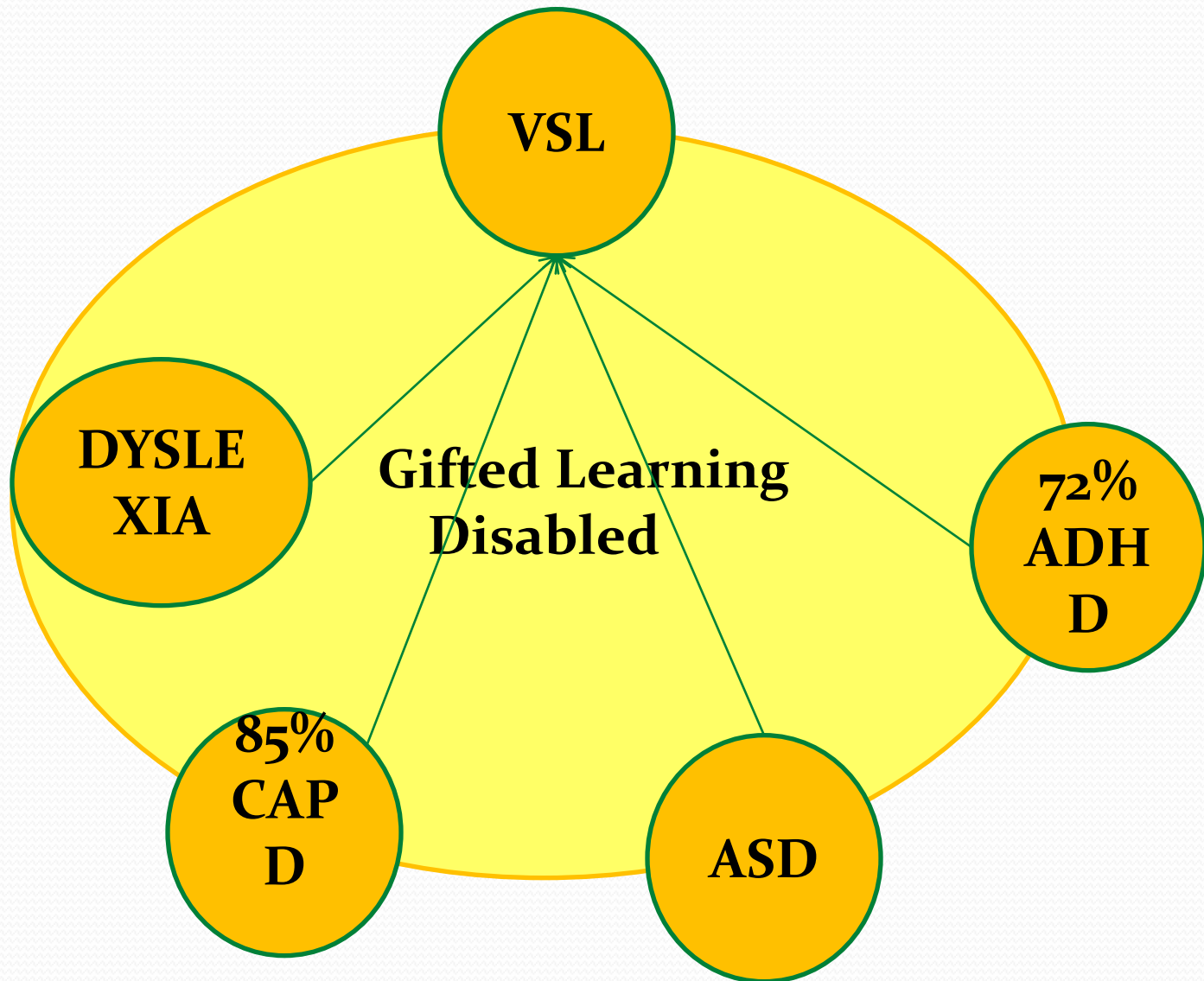
Tactile
Taste & Smell
Under responsive
Auditory
Visual
Low energy/weak
Movement

84% had 1 area that showed a definite difference from the norm.
30% had 4 areas that showed a definite difference from the norm.

www.suelarkey.com.au

Primitive Reflex Work is recommended.
Specialist OT to work with sensory modulation.

Associated Conditions



Visual Spatial Thinking Dominance

76% of the GLD group had a dominant visual spatial thinking system as described by Dr. Linda Silverman in *Upside Down Brilliance*.

Most only think in
3D COLOUR MOVING IMAGES
and in a
MULTI DIMENSIONAL WAY.

But never use this ability to learn at school!

Positive Response

1. Identify & treat underlying conditions.
2. Attend to their social need to be with like minds.
3. Provide a learning structure that allows them to explore their ideas.
4. Teach them Visual Spatial Learning Strategies.
5. Remediate and support via cognitive strengths.
6. Allow them to follow their passions, especially at school. (eg PLIESE provides a great service!)
7. Provide individualized education plans.
8. Teach kids how to understand and manage the emotions of learning.
9. HAVE FAITH IN THEM

Achievement

- Occurs as a result of
 - Interaction between learning style and learning environment
- Therefore there needs to be
 - A better match between the school curriculum and learning environment and gifted students learning needs and preferences , including explicit teaching of skills related to their weaknesses and suitable adjustments to the learning environment.

Resources – Web sites

- www.australiangiftedsupport.com
- www.gifted-resources-centre.org
- www.starjumpcom.au
- www.gifteddevelopment.com
- www.giftedservices.com
- www.piecesoflearning.com
- www.hoagiesgifted.org
- www.egroups.com/group/OnTheRightSide
- www.sinetwork.org
- www.bibliofind.com
- www.inspiration.com
- www.multiplication.com
- www.apduk.org
- www.bbc.co.uk/schools/typing/
- <http://picturemereading.com/index.html>
- www.nswagtc.org.au