Your Induction Program: Kickstarting the year on a great note!

A Brain-Based Perspective
By
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The impact of good education on poverty

- Education has always been considered a dominant tool for reducing poverty and inequality.

- Poverty is strongly correlated with a range of family background variables, including parental education which also influences children’s educational outcomes.

- Formal Education is strongly associated with the decreased possibility of chronic poverty.
Identifying the major source of variance in students’ achievement

- Students’ own ability and achievement = 50%
- Home = 5-10%
- Schools finances, school size, class size, buildings = 5-10%
- Head masters = 5-10%
- Peer effects = 5-10%
- Teachers = 30% (Max 30%)
Considering the brain while teaching: The Rationale

Children do not leave the problems of high poverty communities at the school-yard gate. The effects of poverty serve as barriers to learning, as children living in poverty and exposed to trauma all too often come to school sad, distracted, disruptive, and disengaged (Kahlenberg, Richard. All together now, 2001).

Most schools are not designed to address this myriad of issues that affect learning; and even the best teachers are not trained and skilled to address the effects of this level of adversity on academic instruction.
The BRAIN at work:

- Everything we do, think, and feel stems from the brain--- even our hearts are in our brains...

- Learning happens through the brain- monkey see, monkey do and monkey sees with the brain and not the eyes.

- The child’s brain starts to develop during pregnancy and development continues throughout infancy, adolescence and early adulthood. In fact, the brain is always being modified.

- Our genes and environment interact to dictate how our brains function: “genetically-programmed but shaped by the environment”: PLASTICITY
My brain at school...

Sherlock Holmes: “I am a brain, Watson. The rest of me is a mere appendix.”

Arthur Conan Doyle
How stress affects brain development

- Neural pathways need oxygen & glucose to function optimally.

- The body, under stress, releases cortisol.

- Cortisol, in excess, reduces access to oxygen & glucose. This has toxic effects on brain cells.

- Sometimes, in the case of chronic stress, some neurons become damaged or die as a result of this toxicity.
Poverty-related stress and brain functioning

The CEO of the brain is asleep:

- Low attention span
- Poor planning
- Impaired risk assessment
- Reduced impulse control
- Bad behavior caused by underlying stress, confusion & frustration
- Poor self esteem and learned helplessness
Brain-Based Education: Mission Statement

COMBATTING INEQUITY THROUGH EDUCATION

Establishing fortified teaching and learning environments to address the reasons behind the persisting poor performance of children in high-poverty schools, by focusing on the impact of poverty (via the effects of stress, malnutrition and trauma on brain development) on learning and access to opportunities.
AIMS

1. Create a school culture that provides effective teaching, learning and academic achievement by addressing the impact of poverty and trauma on learning.

2. Ensure that children graduating from your program would be well-equipped to face the challenges of secondary education and beyond.
OBJECTIVES

1. Improve secondary-school readiness
2. Reduce incidents of disruptive behavior
3. Foster positive adult-child and child-child relationships
4. No child is left behind – breaking the cycle of failure
5. Measure aspects of education beyond academic performance
HOW?
BUILDING FORTIFIED LEARNING ENVIRONMENTS
The relevance of building fortified teaching environments
Characteristics of fortified learning environment:

- 1. A clear and shared focus – we are all moving in same direction – we have a plan!
- 2. High standards and expectations for all students – no child left behind!
- 3. Effective school leadership – we know what we are doing, we are prepared
- 4. High levels of collaboration and communication – strong school culture
- 5. Curriculum, instruction and assessments aligned with state standards
- 6. Frequent monitoring of learning and teaching – we track your individual progress together
- 7. Focused professional development – I continue to learn so I improve & adapt
- 8. Supportive learning environment – I know who you are and what you need from providing good infrastructure and pleasant classroom environment to using appropriate pedagogy.
- 9. High level of family and community involvement – Encouraging of but effective without
Main tenets of Brain-Based learning:

- Create the right environment for learning
- Address children’s physiological needs
- Build self-esteem in the child so the child wants to learn.
- Help children develop « emotional intelligence »
- Add movement to learning and plan for regular brain breaks & brain gym!
STEP 1

An effective induction program
Two outcomes: Good vs. Poor Induction

Stressed & Depressed

Optimal Functioning

Scans from Mayo Foundation for Medical Education and Research
De-Stressing the Learning Environment

Executive State
Prefrontal Lobes
What can I learn from this?

Emotional State
Limbic System
Am I loved?

Survival State
Brain Stem
Am I safe?
The importance of a good induction:

- Establishes meaningful contact
- De-stresses the learning environment by making the unfamiliar familiar
- Provides common direction to teachers and learners on their journey together
- Gives confidence to students that they are cared for
- Sets a dynamic tone for planned instruction
- Builds trust in learners as they identify strong leadership in their teachers
- We save time in the long run when everybody knows what is happening when and how
- A good induction sets the stage for high expectations and clear, realistic plans to meet these expectations and evaluate progress along the way.
The following principles and areas to be addressed during an induction:

- To have opportunities to start making friends & building support networks: Sense of belonging within their new school community
- To understand what learning is like in secondary school: Facilitating transition
- To experience authentic learning and have some reassurance that they can cope
- To be reminded how their course will benefit their future plans: Bigger picture
- To have a course induction that allows time for other commitments: Holistic education
Induction checklist:

- Does your induction program allow you to share your school’s Vision and Mission to the new students?
- Is the way the program is structured sensitive to your audience? In other words, how will you make the students feel that you know who they are and what their needs and priorities are?
- Does the program reflect effective leadership?
- Does the program include older students, administrative staff and support staff, teaching and non-teaching staff?
- Have the students had a comprehensive school tour? Do they know all the facilities, services and spaces?
- Does your program include team-building activities?
- Does your program cover all areas of learning the student will encounter during the year and has he/she met with all of his/her teachers?
- Does the student know what is expected of him/her and what he/she can expect of you?
- Is the school atmosphere welcoming and appealing?
- According to the Brain-Based framework, is your classroom environment (physical and pedagogical) conducive to a positive learning experience?
Starting point: My classroom, my universe

- The science of an attractive working environment
- The happy biology of good rapport
- The neuropsychology behind good planning
Checklist for Brain Based Classrooms

Brain organization and

Building safe environments:

- Do students feel safe to risk and experiment with ideas?
- Do students feel included in the class and supported by others?
- Are tasks challenging enough without “undo distress”?
- Is there an emotional “hook” for the learners?
- Are there novel, unique and engaging activities to capture and sustain attention?
Enjoy Learning through teaching!

Thank you!