



The War That Rages In Our Classrooms

What Goes Wrong?

Obstacles to Learning and Healthy Learner Development: Factual Perspectives

Presented By Gerald Williamson (Shaping the Learner)

Summary

This Presentation looks at “*What Goes Wrong in Our Classrooms*” without blaming but attempting to scientifically unravel the issues. The talk has a serious but highly entertaining focus on the issues and factors that create instability in classroom management. The participants are guaranteed to view classroom interaction in a fresh and motivated fashion. The interaction with the presenter will leave the participants with a sense of insight and awe into both the complexity and simplicity of learning and behavioural problems.



Background

When learners enter the formal school system at nursery, preschool or primary level, it is often taken for granted that the basic foundation for optimal learning has been put into place. Since it is increasingly recognized that learning is a lifelong experience, characterized by a series of developmental stages, any breakdown or problem that develops at any of these stages could result in a range of devastating and debilitating difficulties for the learner, educator, caregiver or parent. Compounding the development of problematic learning and behavioral phenomena (especially when seen at secondary school level) is the fact that a host of external factors can also contribute to learner-educator problems. A primary cause for concern though, is the fact that there is a misunderstood notion that problematic learning and behaviour is the outcome of “mischievous, deliberate and calculated” efforts by learners to frustrate the educator and disrupt classrooms. Learners are often negatively labeled by adults as “difficult, delinquent, problematic, disruptive, unwilling, [and] lazy”. Anecdotal evidence from various South African schools suggests that learners themselves find the school and the classroom culture problematic and combative. The result is that many educators and learners are at *war in our classrooms*. Every classroom has become a battlefield - the struggle is for control and discipline. Simultaneously, educators are trying to reach the more explicit goals of the curriculum. This paper will explore various factors involved in classroom learning that interplay substantively to create feelings of animosity, characteristic of many classrooms today.



About the Author:

Mr Gerald Williamson is a Clinical Community Psychologist and a director of Shaping the Learner. He has been active in the education arena for the past 20 years and is involved with research, training and development of district officials, educators, health professionals, therapists, parents and learners. He has designed numerous SETA registered courses and materials that address various concerns in the education arena. Mr Williamson has also been active in the media and has appeared on numerous programmes such as Take Five, Spirit Sunday, and Parliament Live etc. As a social scientist he has dedicated his effort and passion to supporting the education fraternity, communities and government in building a healthy future for all.

About Shaping the Learner: We offer numerous programmes for schools and districts and government departments. Please see our website www.shapingthelerner.com for interesting programmes for schools and others.

This paper is not a scientific paper but should rather be seen as a pedagogic enquiry and analysis into the relationships between educators and learners in classrooms and examines what informs the dynamic human interaction for effective learning. The nature and length of the paper inhibits a complex and full discussion around many of the points raised here. However, it will attempt to refer the reader in the direction of further enquiry. Furthermore, the content of the paper is based on a foundation of knowledge that is highly informative and includes elements of the focal areas outlined below:

The Forming Of A Human Being: Neural Networks And Learning

- ✓ Sensory Experience
- ✓ The Role Of Emotion
- ✓ Making Connections
- ✓ Movement
- ✓ What Goes Wrong?
- ✓ Basics For The Brain: Water And Oxygen
- ✓ Basics For The Brain: Nutrition
- ✓ The Vestibular System And Learning Disorders
- ✓ Fight or Flight: The Stress Effect On Learning
- ✓ Mis-Education And The Labeling Game
- ✓ Drugs And Hyperactivity
- ✓ Brain Gym



The Context of Education in South Africa

Education in South Africa has undeniably enjoyed a major part of the democratically elected government's attention, complimented by a generous increase in budget share. It is estimated that the 2007/8 budget year has seen education receive an unprecedented R121 billion towards reaching the national objectives of South Africa, two of these are poverty reduction and job creation. A large slice of this budget has been allocated to infrastructure development (buildings, water, sanitation etc) in education. A substantial amount has also been allocated to tertiary institutions in order to aid skills building and training.

It should be noted though, that historically, educator training has been neglected, courtesy of the previous apartheid government. The aim of the previous dispensation was undoubtedly to destabilize disadvantaged communities and to keep them enslaved as part of the grand plan of white domination. Where educators were trained, critics argue that the quality of the training has never empowered them enough to deliver a competent service in a focused manner. The latter points are now receiving major government attention on many levels of our education system. The author of this paper recognizes the great strides made by the South African government in trying to stabilize education and to meet the objectives of making education accessible for every child in South Africa. Educational accessibility, as a human right, has been one of the great hallmarks of the drive towards creating a new, democratic society. The achievements made in the last 13 years of democracy have also come amidst large scale criticisms of trial and error approaches, characterized by accusations of incompetence, mismanagement of resources, fraud and corruption and the fostering of a frustrated educator core.

The educator fraternity has long complained that although the new dispensation is well-meaning, its creation of mountains of paperwork and red tape has severely impacted on and has created toxic classroom climates in many schools. In addition to fanning the flames of toxicity in classrooms, there have been accusations that educator training, both historical and current, fail to cover the basics of learner-educator interactions. Critics have argued that educator training content has been too theoretical, bordering on philosophical and has neglected the fundamentals of classroom interactions. Such arguments indicate that the intervention towards stabilizing education in South Africa has reached critical mass, calling for a move from political interventions (characterized by the foundations of policy and guidelines) towards operational management (curriculum building and classroom management).

The author, in his experience within the South African education system, feels that only now (2008), are we reaching a stronger focus on curriculum and classroom management. It is acknowledged by the author that the first phase of setting policy direction and guidelines was necessary but it may have overshot the projected timeline. The impact of spending nearly 13 years on laying policy fundamentals may have negatively affected and delayed curriculum content design and classroom management to the detriment of many a learner and educator. The result of poor classroom management techniques and an underdeveloped and constantly changing curriculum, have in the author's opinion, pre-occupied education authorities. Issues of poor learner behaviour, struggling learner performance, questionable educator behaviour (discipline, ethics, commitment) have created an overwhelming sense of hopelessness and despair among education participants. It should be noted that this point is not individually accusatory but should be seen as a collective error of society as a whole. The point that is emphasized here is that South Africans, including school governing bodies (who represent parents), businesses, politicians and education authorities, may not have foreseen that we needed to stress the importance of a strong curriculum and classroom management training many years earlier in order to provide better structures and guidelines for the education system as a whole.



A Real Problem Exists in Our Midst

It goes without saying that the average South African educator can be described as very dedicated. It has been noted that many educators work under appalling conditions, with low salaries, long hours, no overtime remuneration, overcrowded classrooms, poor resources and doubtful support to name but a few. It is painful to note that the dedication observed is not enough to address many of the barriers to learning that manifest in day-to-day classroom interactions. The author of this paper argues that dedication has to be supplemented with a clear understanding of the dynamics involved in learning and how human beings learn. The author has noted in his training of educators that most, if not all educators, are unable to identify the parts of the learners' brains involved in processing the day-to-day curriculum content. When questioned on the basic fundamentals that should be the hallmark of any trained and professional person, interacting with children, many are unable to highlight the relationship between classroom modalities such as handwriting, copying from the blackboard, eyesight (vision) and the subsequent difficulties that could arise from poor development of these relationships. A further point of concern is that many of the educators attending the author's workshops, felt that it was not necessary for an educator to know about learning barriers. We therefore currently have educators who are unable to name which parts of the brain and body are involved in learning, nor do they understand what happens when learning goes wrong or how to remedy many of the problems arising from learning difficulties? Furthermore, many educators feel that it is not their responsibility to know the what, when and how of these barriers to learning. Some would argue that we have a crisis on our hands - a volcano erupting in the sphere of our education system.

Classroom Management Skills and Curriculum Content is a Critical Factor in Education

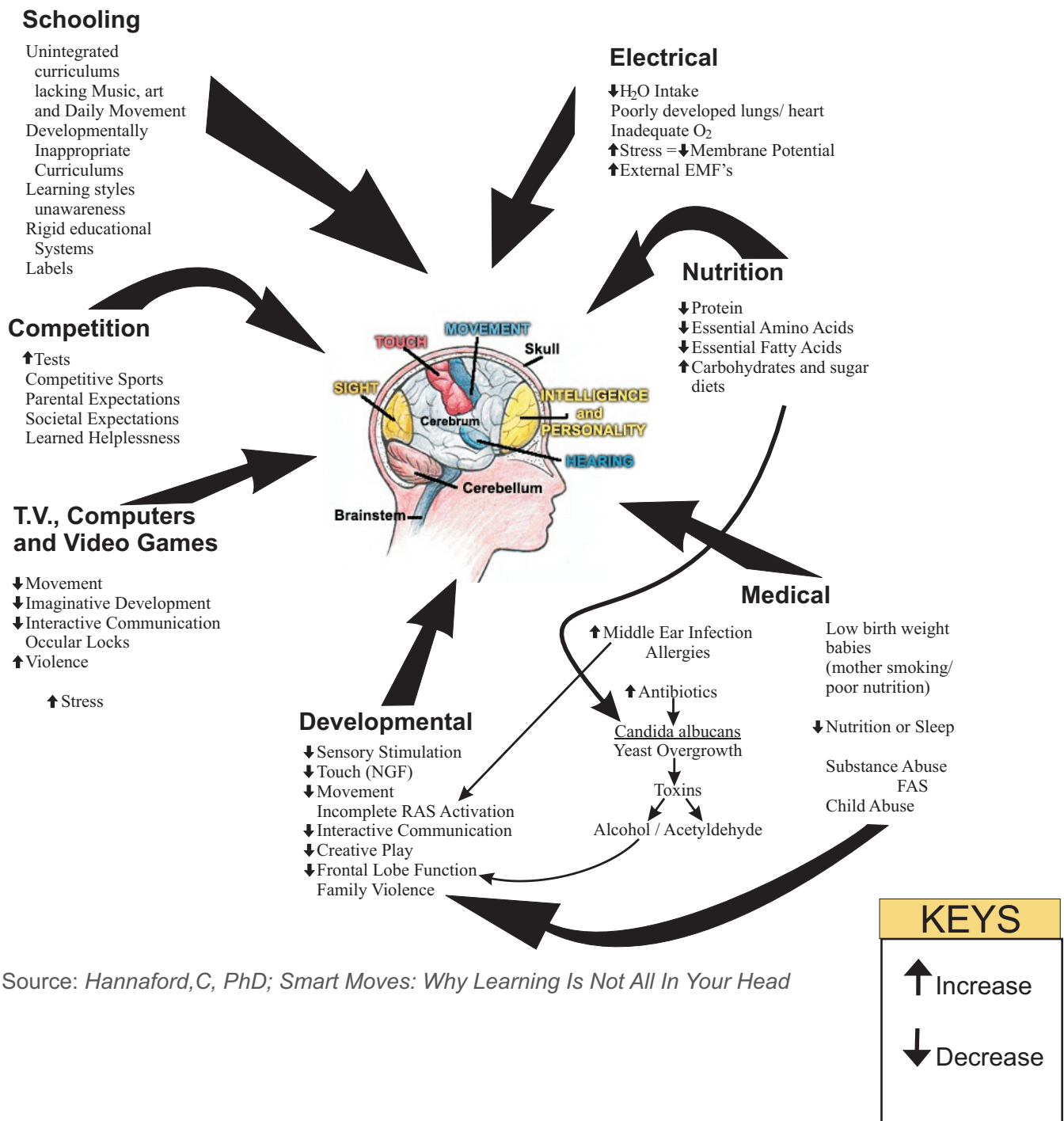
The author argues that the interaction between adult and child, atmosphere and curriculum and infrastructure and support, lay the foundations of core skill development. The author contends that educators must be able to understand why they are facilitating knowledge and fostering new experience and how it interplays neuro-physiologically with the tenets of movement, speech, emotions, experiences, learning and nutrition to create a vibrant, balanced and skilled being. Without this insight, the educator is reduced to a frustrated individual that is unable to comprehend and appreciate the beauty and magnitude of his/her task at hand. It can be argued that such an uninformed educator is occupied with a mindless task, causing them to become demotivated, unhappy and frustrated. Such an educator is not dedicated to produce creatively or interact lovingly with children and colleagues, but is reduced to a batch of clinical symptoms akin to being depressed, angry and abusive, experiencing ambivalent emotions of love and hate, gratitude and despair, happiness and sadness and so forth. This picture of a South African educator is often related to high levels of depression, substance abuse, bad morality, as well as resistance, defiance and non-compliance with the collective vision of the role of schools in our society. The author fears that the increasing numbers of overworked and underpaid, under-skilled, demotivated and frustrated educators does not bode well for the positive development of our education system. The crux of this paper is not to deconstruct the South African education system in every facet of its functioning but as the title of this paper suggests, to hone in on the fundamental classroom dynamics that impact on learning. Although classroom dynamics are influenced by macro-issues, it is the opinion of the author that it is the closed group and one-on-one interaction that best defines the experience for both learner and educator on a daily basis. This paper will attempt to put into context some of the micro interaction issues that inform the classroom experience and affect macro outcomes. This will be done in a manner that assists the reader to appreciate the depth of learning needed to understand the learner and the consequent classroom dynamics fairly holistically. The author argues that every educator should have, for the least, insight into “what inhibits learning” in order to create constructive and peaceful classrooms, or face becoming part of “**The War That Rages In Our Classrooms**”.

So what inhibits Learning and has an Impact on Classroom Relationships?

Human beings possess complex mind/body systems that govern and regulate our relationship with the environment. The mind/body system interaction has been well documented through various fields of neuro-physiological psychology, occupational therapy, physiotherapy, medicine etc. Essentially, the body/mind/environmental interaction is centred on the survival of the human “animal” in the context of everyday living. The familiar concept known as “stress” is therefore a descriptive term that highlights the adaptive abilities of the organism to survive the daily onslaughts (stressors) of human/environment interactions. The human organism (in this case, the child or learner) is constantly faced with a barrage of stressors that have a profound effect on learning. Classrooms, where children often spend up to six hours a day, are perhaps the best observable spaces where the effect of modern day stressors impact on the manner in which they absorb and interact with the objectives of modern education. It is within the confines of this space and within regulated actions that the effects of modern living and the accompanying social impact on children are misunderstood by many in the education fraternity. It is seldom that the often under-trained classroom educator and subject officials “connect the dots” to create an understanding and develop the necessary insights to work in a manner that ensures the children learn, nor do they take the effects of stressors on the mind/body/environment into account.

Outlined in this paper is a graphic by Dr Carla Hannaford PhD, that provides an overview of the range of factors that have been identified as having an effect on the human organism (child) and the way that they integrate education, experience, neuro-physiology and psychology. Dr Hannaford, in her book “Smart Moves – Why Learning is Not All in Your Head” (1995), argues that all of the factors illustrated interplay in a complex manner to affect learning in a dynamic fashion. This paper will not unravel every facet of the points identified in Hannaford's (1995) illustration, but will rather provide a cursory overview of some of the salient points that inform learning in classrooms.

Some of the stressors that people - and specifically children - face in their lives, limit learning and specifically frontal lobe development, which is where intellectual and emotional reasoning, insight and memory are positioned. Stress necessitates an overemphasis on survival-oriented brain processing at the expense of rational limbic and cortical functioning, especially within the frontal lobes. Consequently, stressed out and survival-oriented human beings have less opportunity to develop nerve nets in the frontal lobe and may exhibit any of a range of learning difficulties (Hannaford,1995).



Source: Hannaford, C, PhD; Smart Moves: Why Learning Is Not All In Your Head

Many stressors interlinked and below is a categorization of some of these stressors:

Developmental stressors: if the organism experiences a lack of movement, poor sensory stimulation, lack of appropriate touch, lack of interactive play and communication, Incomplete RAS (reticular activating system – wakes the brain up) activation;

Nutritional stressors: inadequate amounts of proteins, lack of essential amino acids and fatty acids, high carbohydrate and sugar diets;

Medical stressors: low birth weight babies, yeast overgrowth, allergies, chronic middle ear infections, inadequate diet or sleep, child abuse, poor vision or hearing and substance abuse;

Electrical stressors: Inadequate water consumption, inadequate oxygen, excessive exposure to electromagnetic fields (EMF's);

Competition: Inappropriate expectations (at home, school, work and self-imposed), pressures towards social conformity, negative competition in sports and in the arts, learning in a win/lose rather than a cooperative framework;

Rigid educational systems: developmentally inappropriate curriculums, constant low-level testing, lecture/written format for quiet classrooms, ignorance of or inattentive to unique learning styles;

TV, Computers and Video Games: Violence decreases imaginative development, less interactive communication, ocular lock.

According to Hannaford (1995), most of these stressors tend to over-stimulate the survival centres of the mind/body system, resulting in the nerve activity being centred in the sympathetic nervous system and brain stem (where survival behaviours such as attacking and withdrawal behaviours are situated), with little activation of the rest of the brain, such as the frontal lobe.

Neuro-scientific research is constantly establishing a link between stress and brain functioning. For example, the hippocampus of the limbic system, key to memory and learning, is profoundly affected by stress, according to Hannaford (1995). Solomon, Snyder *et al*, who researched rats (and feel that this research applies to humans as well), found that encephalins - chemicals produced in the brain during stress to numb pain - also increase hyperactivity and decrease memory.

Another example would be to understand how stress interacts with the whole body to create a learning effect that is often detrimental to the human being. A learner who comes from a home or lives in an environment of constant or perceived threat (think our very high South African crime rates and the climate of fear, classrooms that are hostile, where educators are constantly a threat, hunger and violence etc), will be more prone to high levels of adrenaline due to these stressors. The learner's mind/body adopts a survival response that is orchestrated by the brainstem, with the adrenaline being secreted at the nerve endings of the sympathetic nervous system and the adrenal medulla of the adrenal glands. The sympathetic nervous system is part of the autonomic nervous system and usually operates without conscious control and regulates the activities of the smooth muscles, cardiac muscle and certain glands.

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According to Hannaford (1995), the sympathetic nervous system is usually concerned with the expenditure and preservation of energy, particularly during perceived danger states and sets up the famous fight-or-flight response, characteristic of all in the animal kingdom. Adrenaline literally takes blood away from most parts of the brain in order to re-route it to the heart, lungs, large muscles (especially arms and legs) and away from the digestive system and the brain. It is in this state that one can observe the typical restless and hyperactive behaviour, poor memory, forgetfulness, fidgetiness so often seen in learners. All of these behaviours are, of course, responses to a dispersal of electrolytes to the membranes of these muscles so that they can contract – preparing the human to fight or flee (Tortora and Anagnostakos, 1990). We often see how overeager and uninformed education professionals and medical practitioners are. For example, they will prescribe drugs in order to control these symptoms, labeling these behaviours “Attention Deficit Hyperactivity Disorder” etc. This is a sad and gross violation of the human rights of the child. The fact that social and educational phenomena are completely misunderstood and pharmaceutical drugs are prescribed as a panacea (often by practitioners who have not studied the relationship between didactics and learning) for issues relating to social phenomena, psychology and neurophysiology. What makes it worse is that this misdiagnosis is driven by the desire of the educator to have a “quiet and obedient” classroom - a learning criteria that seems to pervade the mindsets of many educators. It is assumed that grouping 40-45 learners in many South African classrooms is “natural” and that young learners should be able to conform to this unscientific method of learning. The author of this paper contends that even these inflated ratios of learners per classroom, creates a powerful and unsettling stressor to effective learning. No amount of medication will “fix” learners by overriding their social conditions i.e. fear of the teacher, sexual or other abuse, violence and conflict in the home etc.

These stressors lead to classrooms where educators are at conflict with restless and poorly focused learners. In the more affluent schools, educators have the power to pressurize parents into seeking the help of a medical doctor or psychiatrist (to medicate) in order to solve the problem. After medication has been administered, the educator observes a “compliant” child and is happy to continually administer the medication – because the drug works for the teacher, not necessarily the child! In fact, many educators declare that the child is now sitting still and is actually learning for the “first” time!

Ironically, many prescribers of these drugs (and the educator who does the referral and fills out the symptoms checklists) seldom have an idea of the stressors that affect these children. How many practitioners have interviewed the mother and father to enquire about marital conflict, child abuse in the home, history of crime etc, and do they really have an honest idea of what goes on behind closed doors? Furthermore, how many of the practitioners interact in a multi-disciplinary team that has among others, an educator (for taking a careful performance history, often in conjunction with other educators), a psychologist (for testing and family interviews), a social worker (for home assessment and peer assessment), a psychiatrist (for brain scan and genetic and brain abnormalities etc), an occupational therapist's assessment (for muscle and occupational testing such as muscle tone, visual perception), a nutritionist (to assess food profile) and the medical doctor ,who has to assess for heavy metals such as lead, mercury, mineral and nutrient deficiencies etc? Another irony is the fact that we often allow a non-educationist, who may have never set foot in a classroom, save during their own childhood schooling years, to prescribe powerful and often mind-altering drugs to solve curriculum and social matters. This is clearly not logical, as education and other social conditions interact in a very complex manner.

The impact of stressors (on both the educator and the learner) has often created situations where educators become combatants in a mind-numbing, daily battle with their learners. This battle for control and expression saps the energy of both the child and the educator. In the authors experience, when educators are asked what about their jobs saps their energy on a daily basis? They automatically answer “disruptive and ill-disciplined learners”, quickly followed by the usual culprits of “too much paperwork and poor salaries, long working hours” etc. The irony is that they will also tell you that if it was not for the kids they would have left the jobs a long time ago. Most educators say they love the kids. The author characterizes this fluctuating state as a sad case of ambivalent feelings that swing between love and hate for the child and the job. This constant battle for control (classroom management), as stated previously, is not, however, an attempt at labeling and blaming the educator as “dysfunctional” but has rather developed as a result of incomplete training to recognize and deal with the young evolving mind and how it is affected by various stressors.

The author has highlighted the issue of adrenaline but also wants to highlight the effect of its cousin, “cortisol”. Unless we understand how the mind and body interacts in classrooms, we are unlikely to see optimal and constructive learning taking place, even in relatively peaceful classrooms. For example, during stress, the cortex of the adrenal glands secrete a group of hormones called glucocorticoids. Cortisol (hydrocortisone) is the most abundant of these hormones. Cortisol increases blood sugar levels in order to provide the energy for efficient muscle function. In a flight-or-fight situation, the muscles need an abundance of energy to operate. Research at McGill University concluded that an increase in cortisol (which rises exponentially depending on the level of stressors and adrenaline) is correlated with decreased learning and memory as well as attention problems (Diorio et al, 1993). Does this explain the fact that many learners study hard but end up forgetting the content when writing low-level tests such as exams, for example? Once cortisol levels decrease, we see the content returning when the stress levels are lower (such as “the answer popped in my head when I was listening to music. The holiday after the exam!)

Highly stressed learners who find themselves in traumatic and threatening classrooms with aggressive educators, poor support infrastructures, highly volatile neighbourhoods etc, will exhibit higher levels of adrenalised behaviour, often accompanied by poor or mediocre academic performances. This type of result differs significantly from schools where the environment is more ordered and structured, educators are calmer, freedom of expression is encouraged, opportunities for de-stressing are abundant in the form of emotional support programmes, music, sport, arts, culture etc.

This paper outlines a few points to ponder on when considering the “**War in Our Classrooms**”. It draws a few points together, from the field of social psychology, neurology, physiology, education and biology, in an attempt to deconstruct some of the global phenomena that can be observed in classrooms across the world. South Africans are human beings and are not unique. We are all subject to the same biological processes of the human race. We are special, however, in that we have very high rates of stressors and traumas that have pervaded our society over many years. Many critics have argued that our stressors in modern environments are on the increase and not on the decrease. It is perhaps prudent to suggest that South African children find themselves under conditions of severe threat and trauma due to historical considerations such as structural inequalities, unemployment, poverty, overcrowding in homes and classrooms, malnutrition, underdeveloped curriculums and educators etc.



The trend in this paper is to make education practitioners aware that there is much to be learned about the mind/body interaction and the way our society wishes to nurture our most precious assets - our children. This post-1994 generation of children is not the same as the previous generation. They face infinitely more stressors, often more toxic. The toxicity of these stressors define the difference between yesterday, today and tomorrow. Some of these include high levels of pollution, concerns of mortality and global warming, HIV/AIDS, dwindling food quality, bad nutrition practices, financial challenges, career pressures, crumbling family infrastructures, advanced curriculum contents, higher levels of materialism and peer pressure, huge media exposure to culturally and economically competing values, higher education pressures, poor political planning and support, toxic crime waves etc. We can never suggest that children in modern-day South Africa are of the same calibre and ilk as their forefathers. They are unique and should be seen and engaged with in that context. Children are not to blame for their weaknesses and failures. They are mere role-players in a game controlled by adults, where the child's actions merely serve as a reactive trigger that often exacerbates the effect. If we blame the victim, then we are saying that children, along the evolutionary neuro-physiopsychological continuum, have an evolved brain/body interaction akin to a full grown adult. Does the under-developed brain of a child have the same adult insight into the full range of complexities and consequences of experiences and actions in society today? The author asserts that the war in our classrooms is fought under the banner of unrealistic expectations. We expect to interact with an "adult child", where society (educators especially) expects the young learners to think, feel and reason like adults. The fact that they are biologically predisposed to develop according to an evolutionary pattern, frustrates many adults. All of the neuro-physiopsychological evidence at our disposal provides irrefutable evidence that stressors that affect adults will affect younger children in a more profound way, with the resulting damage often lasting a lifetime.



At best, the current mediocre and muted response to skill our educators with advanced knowledge on dealing with classroom management and barriers to learning, is severely undermining the very goals that education in South Africa is striving for. The points that have been raised as flag issues in this paper should give an indication that we can provide education with more money for conceivably every need but unless we fix the core - the classroom interaction, the learning relationship between master and student, learner and educator, caregiver and child, society and its citizens – it will slowly implode. This paper calls for every educator to be trained in classroom management skills and to have insight into barriers that affect the mind/body/environment/classroom interaction. In this approach, we will see the frustration levels of educators recede, relationships between caregivers and learners strengthen, an increase in respect for the profession of education and teaching, learner stress reducing and learning motivation being fired up, outcomes based education becoming meaningful, careers being fostered, dreams being fulfilled and the societal machine turning in a fairly effective manner. All of this could be a reality if we all foster a collective will to manufacture the “fuel” - our assets and capital, the children - the fodder of our future in a more informed manner. This paper ends with the idea and the dream that the empowerment of just one educator can and will change the lives of hundreds of thousands of South African citizens, if we consider the impact and multiplier effect of just one person's actions on learners, their families and their children to follow. Just ask anyone if they can remember the profound impact of a positive role-model on their actions to this day? According to the author of this paper, a child's educator is the most powerful person on this planet, standing side by side with the power of a parent. We are connected for life to our educators, who have the infinite power to shape our destinies in this world!

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