

# **A New Cognition: Teaching with the brain**

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Since the seventies I've dedicated my life to study cognition and behavioral consequences in children and adolescents living in difficult circumstances such as countries at war, urban guerillas, refugee children, street kids and children at risk in slums all over the world.

Constant violence often contributes to learning disabilities, cognitive and other mental and psychological problems – which can lead to school truancy, continued poverty and social exclusion.

After working and researching the school problems in countries at war in Africa and after 13 years working with street kids in Rio de Janeiro I have identified that those children need to be taught in a different way from the normal schooling methods to understand the content.

After the Candelaria massacre where 8 children of one of my groups on the streets were killed by the police, I founded the Projeto Uerê school in Favela da Maré in Rio de Janeiro using the Uerê-Mello pedagogy tailored to improve knowledge, learning and focusing offering a chance to compete with other children leaving in different circumstances and escape further violence due to poor education.

The Uerê-Mello pedagogy is the result of two decades of studies and teaching children at risk. The pedagogy is a new classroom management method. It uses special oral exercises that help to reconstruct mental pathways and strengthen brain connections that often get disrupted in children who have been traumatized by violence.

These exercises are a new way of visualizing, performing tasks expressing feelings and reducing stress so children will be able to overcome the reduction of short memory, increasing storage of information and improving learning, cognition as well as emotional issues related to violence induced trauma and blockages.

The pedagogy is the opposite of school methods in traditional school that still not take in account the education for disadvantaged children, traumatized but with their intelligence intact. It is a modern teaching strategy based on neuroscience and neuro-education and applying the new discoveries inside the classrooms or teaching spaces.

It is also based on the principle that children at risk learn better when they understand the connections between ideas starting from the local landscape of their classrooms to a worldwide perspective in which they can relate known concepts to the class curriculum. The pedagogy can be implemented in any space as it was done in small villages in Africa in open spaces.

Traumatized children have shorter attentions spans. That is why the Uerê-Mello classes are divided into shorter teaching moments with oral activities to warm the brain. Any explanation should not be longer than 15 minutes. For example, short sessions of Brain gym exercises in all themes have shown to improve response times. And such strategies prove to be very effective in increase alertness. Nowadays the new cognition as I call must follow the change of speed in synapses and neuronal pathways that go along technology.

The pedagogy changes the learning style. It helps the teacher to understand the brain and the pupils coming from difficult lives and experiences. It also gives the teachers creative solutions to educational dilemmas, with the understanding that any solution should focus also in the individual student and not only on broad categories.

Violence has been gradually saturating the world, especially in the developing and underdeveloped countries. As a result of that, many nations are in a state of war, terror, and oppression. This violence reaches children and youth who flee to the streets and into social marginalization. Millions of children grow up under inhumane and violent conditions, miles away from the principles prescribed by the United Nations Children Act or the Universal Declaration of Human Rights. Due to constant exposure to violence, these children at risk develop neuroses and syndromes during their developing years. Many become the aggressors themselves acting violently towards other persons or institutions and therefore they enter a marginal life that often culminates in early death. The magnitude of the growing violence in poor communities has been completely underestimated and governments do not seem to have taken it seriously enough and do not seem to have the right remedy to restore law and justice. The negligence of children living in a state of marginalization is producing a large new generation of traumatized teenagers and adults. Children growing up in conflict zones must be diagnosed early and should have access to special learning methodologies that help them overcome their respective traumas and disabilities. Governments must adapt their policies towards these special needs and provide the tools to stop this obvious spiral of madness.

We believe that the Uerê-Mello Pedagogy, which has been chosen by UNICEF as one of the 6 strategies for action in ending violence against children is one of the best methods to accomplish social inclusion of traumatized children regardless of setting and place.