

1st Jean Piaget Conferences Theories of Development June 26 – 27, 2014 Uni Mail – Geneva

Thursday morning, June 26, 2014

8h45 Adèle Diamond, University of British Columbia Leveraging what we've learned from Research to Help Every Child Succeed: Why the Arts, Play, and Physical Activity Aid Cognitive Development

Abstract:

The brain does not recognize the same sharp division between cognitive, motor, emotional, and social functioning that we impose in our thinking. Our reasoning, self-control, ability to hold information in mind and work with it, and mental flexibility (that is, our 'executive functions') are better when we have had enough sleep and exercise, are not stressed, and feel emotionally and socially nourished. Conversely, executive functions, and the prefrontal cortex on which they depend, suffer most and first if we are sad, stressed, lonely, or not physically fit. (You may have noticed that when stressed or sad you can't think as clearly or exercise as good self-control.) Each of us has cognitive, physical, emotional, and social needs. We ignore any one of them at our peril.

What we are learning about the brain is turning some ideas about education on their head. Research shows that activities that are getting squeezed out of school curricula – such as the arts, physical exercise, and play -- are excellent for developing executive functions and therefore for success in school. The arts have never respected the arbitrary separation of heart, mind, and body. For thousands of years, people in all cultures told stories and passed down information by word of mouth, made music, sang, danced, and played. Why have those activities lasted so long and arisen everywhere? Perhaps it is because they address all aspects of the human being -- our cognitive, emotional, social, and physical needs. What nourishes the human spirit may also best for executive functions and cognitive development.