# The science of social and emotional learning

INTEGRATION OF SOCIAL AND EMOTIONAL LEARNING PROMISES TO BE A WIN-WIN FOR EDUCATION. ANANTHA KUMAR DURAIAPPAH AND NANDINI CHATTERJEE SINGH DISCUSS THE IMPORTANCE OF ADOPTING A WHOLE-BRAIN APPROACH TO LEARNING.

The current design of curricula and skills in the education system has largely assumed that schools are primarily responsible for academic learning and have little to do with emotional and social skills. However, recent findings from cognitive neuroscience and brain research have revealed that emotion and learning are closely linked (see for example, Zins' 2004 study). Gazzaniga's study in 2008 of brain anatomy has shown that the regions involved in emotion processing are strongly connected to the areas involved in both learning and decisionmaking. Additionally, it has been established by Thompson in 1988 that emotional development is directly associated with social learning.

Given the physical connection between emotion and cognitive areas in the brain,

when children are socially or emotionally distressed, learning is critically affected. The attention of the child is absorbed with the distress at hand and subsequently becomes unavailable for learning. Furthermore, since attention itself has limited capacity, the ability of the child to learn, read, participate, or recall what was said in the classroom is severely reduced. Coupled with parental and societal expectation, unless this social



or emotional distress is addressed, such a situation quickly builds into a negative loop, often leading to further anxiety, stress, failure, poor academic performance, and depression.

Since the objective of all schools and teachers is to create ideal learning environments, where children are focused, attentive, engaged, motivated, and most of all 'nurtured', there is an urgent need for teachers and school administrators to be made aware of these research findings and empowered and trained to embed social and emotional learning in the classroom. This is imperative since learning does not occur until the brain is socially engaged and emotionally secure.

## How can teachers embed social and emotional learning in classrooms?

In order for teachers to utilise this knowledge effectively in the classroom, two important points need to be emphasised. One is to familiarise them with how learning happens in the brain and the second is to empower them with information and practices that help embed social and emotional learning in the classroom.

One of the most important and revolutionary insights from neuroscience research has been the discovery of a phenomenon called 'neuroplasticity' that finds mention in Draganski et al's work in 2004. Neuroplasticity is the ability of the brain to form and reorganise neural connections. This forms the basis of all learning and also brings to the fore an important reality – the capacity of the brain to be trained. For instance, no specialised region exists in the brain for reading and yet the brain learns to read. According to Dehaene's study in 1997, this happens because of neuroplasticity, when classroom instruction teaches children to link regions of the brain meant for hearing (language sounds) to those meant for visual processing (visual symbols) and with those meant for language (semantic meaning) to ultimately build a reading circuit in the brain. In short, the brain can be trained to read.

In similar ways, the brain can be trained to deal with stress, negative emotions, anxiety etc. as the situation may be. Previously teachers focused on children's intellectual material, without explicitly paying attention to building their social and emotional skills and preparing them to deal with natural emotional experience. Learners encounter such experience when approaching new material, be it new math problems, new languages, or new cultural norms. Preparing children to deal with different cultural scenarios and possible emotional journeys makes them feel secure and confident.

On the other hand, teachers with strong social and emotional skills possess the ability to develop supportive relationships with their students and recognise that all cultural and emotional experiences are not identical. They demonstrate cultural sensitivity, understanding that student perspectives vary and account for this during learning. Teachers recognise that 'all brains are not same' and children learn at different rates and in different ways. They include multisensory approaches in their classroom instruction, allowing children to create individual learning journeys. Pro-social behaviour is intent or social behaviour to help others, without specific benefit or reward. Teachers recognise that stress is contagious and take care to exercise emotional regulation and manage their stress before entering the classroom.

A study by Goddard, Hoy, & Woolfolk Hoy in 2004 concluded that when teachers experience mastery over socially and emotionally challenging classroom situations, they experience a greater sense of efficancy and enjoyment of teaching. In contrast, Jennings's research in 2015 found when teachers experience psychological distress (or a lack of well-being), their ability to provide emotional and instructional support to their students is impaired

With the vision of 'Transforming Education for Humanity', UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) develops programmes to promote Socio-Emotional Learning (SEL), innovate digital pedagogies and empower youth to build peaceful and sustainable societies around the world, in line with the United Nations Sustainable Development Goal (SDG) 4, Target 7. The Institute's programmes adopt a whole-brain approach to learning and are designed to equip young learners with competencies of empathy, compassion, mindfulness and critical inquiry (EMC2).

In this context, The Global Citizenship programme is a self-paced, self-driven digital-interactive course on contemporary global issues with a focus on building SEL skills in adolescents. It is established on the grounds of the Libre process - an indigenously developed pedagogical approach that is rooted in neuroscientific evidence and is designed to integrate pedagogical tools such as storytelling, inquiry, reflection, gamification, and discussion. The course aims to develop competencies such as Empathy, Mindfulness, Compassion, and Critical Inquiry (EMCC) through knowledge and understanding of global citizenship themes such as migration, nationalism, governance, citizenship rights and duties, identity, and violence. The programme intends to provide an engaging, interactive, and individualised learning experience for every learner.

The programme is being implemented in schools in 10 countries around the world this year. Teachers from four participating countries (Bhutan, India, South Africa, and Sri Lanka) were trained earlier this year and are currently implementing the project suc-

### cessfully.

Such explicit integration of social and emotional learning promises to be a winwin for education. It seeks to produce not only individuals who can read, write, count and earn a good living but offers the promise of learners who recognise the inherent interconnectedness and dignity of all life, exhibit prosocial behaviour and the values of acceptance, equality, respect for diversity, empathy, and compassion. Education that is based on this approach has the potential to trigger a powerful surge of positive transformation in students and in society. **T** 

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