Director’s Corner: Biodiversity Benefits

“The beauty in the genome is of course that it’s so small. The human genome is only on the order of a gigabyte of data...which is a tiny little database. If you take the entire living biosphere, that's the assemblage of 20 million species or so that constitute all the living creatures on the planet, and you have a genome for every species the total is still about one petabyte, that's a million gigabytes - that's still very small compared with Google or the Wikipedia and it's a database that you can easily put in a small room, easily transmit from one place to another. And somehow mother nature manages to create this incredible biosphere, to create this incredibly rich environment of animals and plants with this amazingly small amount of data.”

Freeman Dyson, Physicist

As we consider the lessons we can learn about educating and raising children by observing the animal kingdom, the principle of biodiversity is a helpful place to start. The most stable ecosystems have significant diversity within and between species, in part because they are better able to cope with the stresses of change. Furthermore, the diversity of life demonstrates that there are literally millions of ways for living organisms to meet their biological needs of survival, which for humans include oxygen, water, food, shelter and sleep. In order for species to survive, organisms also need safe places to raise young to maturity. Abraham Maslow expanded the notion of safety for humans to include both physical and psychological safety, and then he suggests that in order to thrive we all need to form relationships that provide love and belonging and to participate in society that offers a sense of esteem. According to Maslow, these foundations are necessary in order for humans to have the motivation necessary to strive for their full potential. In other words, the health and sustainability of human ecosystems depends on our ability to build such foundations for everyone, beginning in early childhood.

Certainly, families have the primary role in providing for our youngest children’s needs, but our school community aims to support families. For example, at the physical level, we offer healthy snacks to everyone, with accommodations for children with special dietary needs. Similarly, with respect to safety, we endeavor to create a secure context for children and families with varying temperaments, cultural and linguistic backgrounds, etc. Doing so means that we cannot use a one-size-fits-all approach but rather must tailor our strategies to each individual, as needed. The same is true for the varied ways we encourage children to form relationships with each other and with the diverse adults in our laboratory school context. Some children naturally connect with a wide range of peers within the first weeks of school, while others prefer a slower pace with a few key adults and close peers. Similarly, there are children who love opportunities to share their knowledge and skills with the whole group at circle time, while others choose to communicate individually with an educator or wait to tell their families about their accomplishments at the end of the day. We increasingly observe that children can thrive in many different ways. By creatively crafting unique approaches for each of the children we are parenting and educating, and at the same time for all the adults in our spheres of influence, we can together build an incredibly rich learning community. We look forward to hearing any ideas you have for how we can best support the diverse learners at the Children’s School.