

To Wonder is to Question

The silver crescent high, radiating the only light in the blanketing darkness that is the night sky. We stood barefoot on the savannas with our primitive understanding of the universe – we have always attempted to make sense of everything. By asking ‘Why does the Sun and Moon move that way?’, calendars of the world were set – this increased the volume of food production in agrarian societies worldwide; and by asking ‘Why do some points of lights in the sky not move, while some do?’, and through monitoring the divine motions of the celestial bodies above our heads – we devised arcane symbols we now call constellations, which brought about a revolution in navigation and transportation at the time.

We have since then uncovered wonders undreamt of by our ancestors and those who first pondered on the true nature of the tiny specks of light in the sky. Inventions in human history were made by asking questions like: ‘Why are planets and stars round?’, ‘Why is the sky blue?’, and most importantly of all ‘Why are we here?’.

In our classrooms, there was somehow always a right answer; there was always an answer that pupils were supposed to get to. The ‘Learning Objective’ so to speak, discouragement at every corner of the learning process for pupils who want to pursue their own interests on a certain subject, or to revisit more conceptual or abstract ideas. We merely teach the products and the findings of Knowledge of the past, without giving our students the opportunity to think and decide for themselves, without giving them the chance to wonder.

‘Any questions?’ The room went silent. Glances shot across the room by pupils to police and judge the approval of their peers before posing a question that might be considered ‘dumb’, they rarely ask follow-up questions in the classroom, even though they were given an unsatisfying answer; easily content with half-answers, something has happened between the 1st and the 12th grade that made them lose so much Wonder and enthusiasm.

A hand amidst the sea of heads. ‘Why is the grass green?’ she asked. ‘Grass contains the pigment chlorophyll, which is green in color.’, ‘Well why is chlorophyll green then?’, ‘It is because it is, what did you expect grass to be, red?’ - A few more negative experiences like these

and the sense of Wonder and curiosity in the classroom will have gone extinct. It does not take many years before our pupils start asking less and less questions, because they soon recognize that these types of questions irritate and annoy Educators.

Our Educators are somehow put off by being asked questions, whether they are afraid that they cannot provide a satisfying answer in a coherent manner, too many of our Educators dismiss questions and respond with frustration – before quickly moving onto something else. What exactly is wrong with admitting that you do not know everything? Does the act of admitting that you are not as omniscient in the classroom as you once thought dismiss your authority to instruct our pupils? Is your self-esteem so fragile to the point where you cannot admit that you do not know everything? Is it that hard to say ‘I do not know.’?

A better response would be: ‘I do not know why chlorophyll is green in color, but perhaps I will tell you at a later date or you can figure it out yourself.’, and you return with a proper explanation of how chlorophyll is green because the sun produces green light the most at any given time, and plants reflect green light to protect themselves from sunburn. See how the initial response not only arouses curiosity, because it poses a personal challenge for pupils- it also creates an atmosphere of Wonder in the classroom. It motivates pupils to learn on their own, embark on their own journey of discovery to satisfy their inborn curiosities. ‘Why plants need light at all?’, It does not take much effort, nor does it take much patience to say ‘I do not know, perhaps nobody does, maybe you can be the first one to find out.’, but as soon as you give non-answers or respond in frustration – you lose another student.

When Galileo turned his telescope to the sky, he discovered that Jupiter had a ring of moons circling it, just as Copernicus had deduced for the motions of the planets around our Sun. He also discovered that Mercury and Venus at particular times of the year, were partially obscured by the Sun. ‘If not for the fact that we revolve around the Sun, what else?’ he uttered. In his book ‘Dialogue Concerning the Two Chief World Systems’, he wrote:

“Nor can I ever sufficiently admire [Copernicus and his followers]; that they have, through sheer force of intellect done such violence to their own senses as to prefer what reason and logic have told them over what sensible experiences plainly showed them.”

The true nature of the cosmos avoided the many of the greatest minds of our ancestors, Plato, Pythagoras and Ptolemy all subscribed to the geocentric view of our solar system. If our senses told us that the lights in the sky rise and set around us; ‘Is it not evident that we are at the center of the universe?’, ‘The universe was created for us!’, ‘We are at the center!’, ‘We are so special!’ We did our best at the time – and perhaps that is all we can ever do.

We as humans may fancy the idea of absolute certainty, we like to think we have attained it, but if there is one thing history has taught us – is that the only thing we can hope for in our pursuit of the Truth, is a continual and successive improvement in our understanding of the universe, with the reminder that absolute certainty will always elude us. Who knows what unfathomable secrets rest on the edges of our cosmos? Who knows what untold opportunities beyond our Earthly skies beckon? All we can do at present is to wonder.

Everyone has a natural appetite for curiosity; we are born to wonder and to question. Every question is a pry, an attempt at understanding a little bit more about our world. There are naive questions, there are tedious questions, there are ill-phrased ones, vague ones, but there is no such thing as a dumb question.