





Professor, Texas Tech University, USA

The Covid-19 pandemic has once again highlighted the importance of effective communication skills and interconnectedness in a flat world.

$U_1 \ N_1 \ D_2 \ E_1 \ R_1 \ S_1 \ T_1 \ A_1 \ N_1 \ D_2$



e are all hoping that the pandemic infection will subside soon and become an endemic, which we can control and live with. Vaccine development has been a remarkable success and a triumph for science. Scientists, medical professionals and first responders are heroes, who saved the mankind by showcasing enormous courage and sacrifice.

Field specific and subject matter expertise in infectious diseases, molecular biology, genetic engineering and allied fields all played important roles in the development of vaccines. Material scientists particularly, technologists with technical textiles expertise are playing a key role in developing personnel protective equipment such as medical drapes and face masks.

While research and development in technical and scientific fields enabled us to get a handle on the unseen enemy, soft skills like effective communication, complex policy making, planning and implementation have shown to be equally important in waging the war against the virus.

C₃

Soft Skills

Ongoing research at the Nonwovens and Advanced Materials Laboratory, Texas Tech University has shown that mask mandates are effective in reducing the spread of the virus. With the more infectious omicron, scientists and some policy makers are recommending the use of highly fitting masks like N95. Government agencies and nonprofit organizations must communicate the benefits of masks and other countermeasure policies to the general public. Effective communication skills, while respecting individual choices and privacies

have become equally important. COVID-19 has shown again and again that people skills such as reasoning, decision making on important issues such as mandates, physical isolation requirements, travel restrictions and relaying such sensitive information have huge impact in the society. The pandemic situation demands debating skills, swift decision making based on available facts, and navigating many complexities such as people's livelihoods without compromising safety. All these require skills that are not prescribed in subject specific textbooks. This ongoing pandemic has certainly made us take a hard look at our current structured higher education system, which in the past four decades has mainly focused on training technical subjects to the populace and not impart additional skills that are needed to become global citizen scholars.

Expert View

Education landscape needs fine tuning not only to impart subject matter expertise, but also global skills and above all build character. I had the privilege of enlisting the views of three distinguished intellectuals about the educational needs for the present and future generations.

Dr. Brian Still is a leading academic administrator and an entrepreneur who heads the largest college at Texas Tech University who emphasized the need for broader skills like critical thinking. Dr. Srinivasan Narasimhan, who was an associate of Nobel Laureate, late Professor Herbert Brown at Purdue University gives his perspective on the future needs of comprehensive education. Mr. Kanti Jasani, a product of Indian and American education system who migrated to the United States from Baroda some 50 years ago sees the education landscape with a global lens.

Educating a society is the most important task of every society as it empowers people towards self-



governing, democracy, growth, and development.

Listening and Interpersonal Skills

Again, COVID-19 has created heightened awareness on "in-person" learning. Since Y2K, virtual office has slowly evolved and for people in the IT sector, switching to online mode has been a natural progression. However, medical, manufacturing and K-12 sectors did experience the major shift from in-person to virtual mode of operations. In the education sector, parents and students



realized that in-person learning has advantages. When vaccinations were catching momentum, school districts and Universities were eager to return to in-person teaching and learning, with necessary safety measures. In my interaction with many students and colleagues, it has become clear that the classroom setting provides personal touch, nurtures friendship and imparts people skills. Indeed, COVID-19 with all its ill effects has brought out good in people such as the awareness on global thinking and how we are all interconnected in this flat world.

Listening to others and understanding the needs of others have become important these days although, listening was an age-old practice of learning. All great Indian epic texts have their roots in conversations between people and answers to questions that came out of conversations resulted in great texts that stand the test of times. Again, the desire to come back to schools strengthened our beliefs in listening and learning in live settings. Listening to others makes learning meaningful whether such activities happen in social science or physical science disciplines. "We can better engage



students as learners, and prepare them to be successful, by affording them as many opportunities as possible to engage in research and creative activities throughout their education. Let's provide more internships, community outreach projects, and other activities that challenge them to put their education to work in practical and impactful ways," stated Dr. Brain Still, Interim Dean of the College of Arts and Sciences at Texas Tech University.

Listening also helps with selfimprovement as it serves as a selfassessment tool. Personal appraisal is the first step towards growth, stated Dr. Srinivasan Narasimhan, President of Chennai-based Asthagiri Herbal Research Foundation, who had one of the finest opportunities to learn and listen from Nobel Laureate Professor Herbert Brown, when he did research in Professor Brown's laboratory some four decade ago. One should always seek to go out of their comfort zone to get rejuvenated and get fresh ideas-again such activities emphasize listening from people who may not necessarily be in one's field or area of expertise. Such efforts will bring fresh ideas, interpersonal and interdisciplinary skills, and lead to personal and professional growth. "Interdisciplinary skills will lead to innovation, and we invariably use this aspect in all our projects," stated Dr. Narasimhan. A study of insect behavior towards chemical cues resulted in the development of ecofriendly products for crop protection, added Dr. Narasimhan.

"What one needs to be successful in this ever-changing world taken over by COVID-19, supply chain issues, shortage of basic needs in some parts of the world, is soft skills starting with honesty, trust, open and truthful communication, self-confidence and ability to separate truth from fiction," noted Kanti Jasani, President of Harrisburg, USA-based Performance



Dr. Srinivasan Narasimhan



Kanti Jasani

& Technical Textile Consulting. Having undertaken projects in India, United States, Turkey, Mexico and in other parts of world, Jasani highlighted the importance of outside the box thinking without getting bogged down with single track learning.

Skills for Future

While solid field specific education is offered by higher education and vocational colleges, given the complexities in the present world, to navigate in the future, worldly skills such as diplomacy, global engagement, effective communication are needed. These requirements are shaped based on what we are facing now such as the ongoing tension between Russia and Ukraine, failure to follow COVID-19 safety protocols by those in power in the United Kingdom, political fights among parties which stall growth agenda, etc. To overcome these sensitive challenges, we should be equipped with good qualities such as belief in negotiations, service mentality and putting common good above one's self-interest. Additionally, critical thinking will be a valuable asset.

According to Dr. Still, "Awell rounded education should mold students into critical thinkers and ultimately become capable contributors to make the society better. A university isn't a place just to learn a technical skill that may only be narrowly applied. Students should expect to be introduced to new ways of thinking, to concepts and ideas across a broad range of subjects provide a foundation of knowledge that can be used not just to get a job, but also to establish an appreciation for learning and thinking that is built on throughout the remainder of their lives."

With established institutions, subject matter expertise can be obtained provided if one puts in some hard work. These are alone not enough, as everyone is expected to be a global citizen scholar. Current structured educational set-up may not be able provide these much-needed qualifications unless they adopt and change. Academic institutions are noticing these needs and are making efforts to impart additional knowledge by enticing experienced professionals to teach and interact with faculty and students. A new group of academicians has evolved in the United States known as "Professors of Practice," a welcoming addition to faculty ranks.

COVID-19 has clearly heighted the need for a holistic approach to solve difficult problems. Serving the society should be the way of living. Martin Luther King Jr., aptly stated, "Everybody can be great, you don't have to make your subject and verb agree to serve." People have realized the need for a revolution in education, which will shape citizens to be global citizens caring for one another! Indeed, listening is a skilled art!