VidyaVikas Education trust's

Universal college of engineering

Gujarati Linguistic Minority Institution

DTE Code: 3460

NAAC Accredited with B+

APPROVED BY AICTE, DTE, UNIVERSITY OF MUMBAI, MAHARASHTRA STATE GOVERNMENT

Volume: 4 | **Edition : 6** | **December 2021**

A S H T A G

Applied Science and Humanities Department
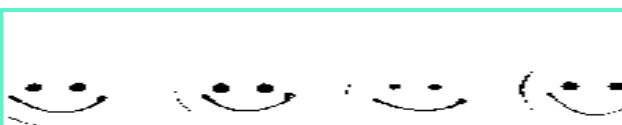
VISION

The Department of Applied Science and Humanities is committed to dynamically integrate the components of Science, Humanities and Engineering to groom students to transform them as globally acknowledged professionals.

"A smile is happiness you'll find right under your nose."
— Tom Wilson

MISSION

The department is carrying a mission to create and disseminate the knowledge and techniques in intellectual areas of Engineering and other core areas of Applied Science and Humanities for betterment of Eco system.

To inculcate the importance of Applied Science and develop a natural flair for Engineering and Technology which in turn shall mold students into a competent professional.

To be recognized for practicing the best teaching-learning processes to create highly competent, resourceful, and self-motivated young Engineers for the benefit of the society.

The 5 Biggest Technology Trends In 2022

In 2022 the covid-19 pandemic will continue to impact our lives in many ways. This means that we will continue to see an accelerated rate of digitization and virtualization of business and society. However, as we move into a new year, the need for sustainability, ever-increasing data volumes, and increasing compute and network speeds will begin to regain their status as the most important drivers of digital transformation.

For many individuals and organizations, the most important lesson of the last two years or so has been that truly transformative change isn't as difficult to implement as might have once been thought, if the motivation is there! As a society, we will undoubtedly continue to harness this newfound openness to flexibility, agility, and innovative thinking, as the focus shifts from merely attempting to survive in a changing world to thriving in it.

With that in mind, here are my predictions for the specific trends that are likely to have the biggest impact in 2022. You won't find musings on quantum computing, neural interfaces, or nanotechnology – while they are certainly on the cards, their impact will be felt further down the line. Instead, the most important trends in 2022 are likely to focus around the convergence of technology trends, as tools emerge that let us combine them in new and amazing ways.

Artificial Intelligence everywhere

AI has permeated the tools we use to carry out everyday work – from the ubiquitous voice assistants to language translation and tools that allow us to extract structured data from pictures, whiteboard scribblings, and hand-written

notes. It also powers much of the robotic process automation that has enabled workloads to be lightened in admin, logistics, accounting, and HR departments. Whatever your industry or job function, you're likely to find there's an AI-powered solution designed to make

your life easier.

Everything-as-a- service and the no-code revolution

Another increasingly powerful driver will be the ongoing democratization of data and technology. In recent years an entire industry has emerged which aims to put the skills and tools necessary for tech-led innovation in the hands of as large a proportion of society as possible, regardless of their expertise or experience. Cloud solutions for storage, network and processing mean costs, and risks of setting up expensive infrastructure in order to try out new ideas are heavily mitigated. Hybrid solutions have matured to the point where a "best of both worlds" solution is often viable.

No-code interfaces will become more popular as a lack of programming knowledge, or a detailed understanding of statistics and data structures, will cease to become a barrier to bringing a world-changing idea into reality.

Digitization, datafication and virtualization

During 2020 and 2021, many of us experienced the virtualization of our offices and workplaces, as remote working arrangements were swiftly put in place. This was just a crisis-driven surge of a much longer-term trend. In 2022, we will become increasingly familiar with the concept of a "metaverse" – persistent digital worlds that exist in parallel with the physical world we live in. As the rate of digitization increases, these metaverses will model and simulate the real world with growing accuracy, allowing us to have more immersive, convincing, and ultimately valuable experiences within the digital realm.

Transparency, governance and accountability

For technology to work, we humans need to be able to trust it. We already (rightly) see strong pushback against many ways that technology is currently being used that are seen as obtrusive, dangerous, or irresponsible.

The idea of transparent and explainable AI has been growing in popularity over recent years, as it has become clear that there are segments of society that distrust it – clearly with good reason! Governments, too, clearly understand that there is a need for a regulatory framework, as evidenced by the existence of the EU's proposed Artificial Intelligence Act.

Sustainable energy solutions

During the pandemic, renewable energy was the only form of energy that saw usage increase. In the US, renewable energy use increased by 40% during the first ten weeks of lockdown. Worldwide, all non-renewable energy usage decreased as industries shut down and people stayed at home, leading to an overall reduction in emissions of 8%. This has led to an expectation that increasing investment will be put into generating energy from renewable resources in coming years.

By Bernard Marr

Contributed by: Shivam Shukla

Source:https://www.forbes.com/sites/bernardmarr/2021/09/27/the-5-biggest-technology-trends-in-2022/?sh=308b01c22414

Importance of Literature in Technical Education

This article, very briefly, focuses on the role of literature in technical colleges. Though we are living in epoch of technology yet we cannot ignore significance of art, music, dance and the most importantly literature which enables us not only to touch but also to feel, and not only to see but also to perceive.

Functions of Literature

1. **Elevates us**

   In arena of technical Education such sources of rejuvenations of one's mind and soul can work wonder in terms of productivity. It is hard to generate through other means the "contemplative abstraction'' which is so poignant that can align and amalgamate "inwardness of human feelings'' to the "embodied forms of surrounding world."

2. **Reading as a therapeutic measure**

   In college campus, we have found „stress" a gigantic problem. It works as a seed to give way for so many other related problems in students" life. In their clueless effort to do away with stress, students fall prey to various malice like alcoholism

   Under such situations, if they are provided with a sufficient dose of a good literature which can heal their wounds, and can rejuvenate them with positive spirit then it would be a boon not only for their lives but for the society at large

3. **Literature trains our emotions**

   Till late 1980s, it was believed „Emotions do not play any role in one"s professional success. However scene got reversed with new research

conducted by a series of scholars. Among all these, Dr Daniel Goleman emerged as pioneer. He in his famous book „Emotional Intelligence" proved that behind all rational human decision (for business administration management etc.) a complex network of emotions play a very crucial role

With this background, we can invoke another function of literature to serve as facilitator in a technical education. Literature trains our emotions. It teaches us how to get angry, how to love, how to hate, how to envy, how to feel and ultimately not to be destructive while going through all these mental states. And to this process we can call channelizing our emotion for a constructive output

4. To Re-live others perspectives

Literature can help us to understand world around us. In an age of technology and social media networking, human life has been very multifarious. With the changing times, social norms are changing, joint families are disembarking to form nuclear set ups. Challenges being faced by a working woman at workplace and back at home are posing very serious questions on the hierarchy of social organizations. Here literature can play a vital role for those who are involved in technical education either as a teacher or as a student. When we go through a literary work we get to know other"s perspective and emotions.

5. Mirror to Society; Gender and Identity

This is a saying, banal and unremitting: Literature mirrors Society. Obviously, changing realities of society reflect in any piece of work being

produced in a particular social context. Therefore literary text can prove a viable medium to make students aware and active participants in the change. Our civilization inherits a rich cultural legacy from ancient times. Its glittering sides no doubts erects an epitaph of greatness where high human values are placed before us. But on the other side, there definitely exists a bunch of stereotypes related with women and position of man in society.

6. **Transition of values; Literature and Culture**

How to transfer cultural values from one generation to another has always been a matter of concern to an enlightened society. Only through religious preaching or didactic books, values are difficult to transfer to younger generation. Prosaic moral clichés are far less efficient in terms of impact if compared to a story or a poetic work delivering the same message. Also, in its vivid descriptions, a good work of literature preserves the cultural nuances of a society, otherwise destined to be lost in meadows of time. Therefore, sufficient input of well-meaning literature into chronicles of technical education will only benefit us without any negative repercussion. It is beyond doubt that good reading makes us more human. So, it is our moral responsibility as technical educators to produce more human doctors, Engineers, and Skilled professionals. Literature can help us a lot in this.

By Anuradha Pandey

Contributed by: Marina Thomas

Source: http://data.conferenceworld.in/NCCW/P46-49.pdf

Congratulations

Shivam Shukla for publishing the article "*A Review on Shape Memory Alloy , Behavioural Fatigue and its Application*" in International Journal for Research Application and Management

The Mathematics Team of Applied Science and Humanities for Creating an Add-on course, "Mathematical Modelling" for the Artificial Intelligence and Machine Learning Engineering Department.

Edited and compiled by Marina Thomas.

Send Your Articles and feedbacks to ucoeashtag@gmail.com

Follow us on our Facebook Page:

https://www.facebook.com/ashtaguniversal/?modal=admin_todo_tour

Address:
Universal College of Engineering
Near Bhajansons & Punyadham, Kaman-Bhiwandi road, Vasai, Palghar- 401208
Contact: +91 8007000755
Website: universalcollegeof engineering.edu.in