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Overview of online learning and the benefits to the learners

Y. V. Subrahmanyam, Center-in-Charge, DEI Information Center, Secunderabad

1. Introduction

What is online Learning?²

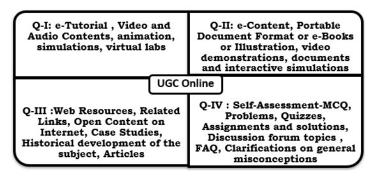
"Learning is an enduring change in behavior or in the capacity to behave in a given fashion, which results from practice or other forms of experience."¹ We also mention knowledge or the acquisition of knowledge when we discuss learning.

Constructivist theory is based on the belief that learning is more effective when a person participates in the learning process rather than trying to receive knowledge from someone else. The learner constructs (builds or creates) meaning and knowledge, upon what he or she already knows.

Social-cognitive theory is based on the assumption that people can learn by observing others.

Information processing theory describes how information is received, processed, stored, and then retrieved in the human brain.¹⁴ "Online learning model means a mode of providing flexible learning opportunities by overcoming separation of teacher and learner using <u>internet, e-Learning Materials</u> and full-fledged programme delivery through the internet using <u>technology assisted mechanism and resources</u>"¹

2. Online Methodology



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The learners' engagement will be monitored via participation in asynchronous/synchronous discussions, assignment activity and programme involvement. The analytics of Learning Management System(LMS) shall be used for ensuring the learner's participation at least for 2 hours every fortnight.¹

2.1 LMS: Learning Management System

A learning management system is a web-based software program designed to enable the delivery and management of all online learning activities, such as online courses, videos, engagement exercises, discussion forum, and tools to help learning and also understand the progress of learner³ by the faculty.

Some of the primary capabilities of LMS's include:

- Online communication (announcements, discussions, chat forums, videos, eLM, etc.)
- Delivery and interaction with content (posting of content, interaction with exercises, etc.)
- Submission, grading and return of assignments
- The publication of grades

$2.1.1\,LMS$ tools and functions

Common tools that one will encounter in an LMS include: Announcements and news items, Content areas, Discussion boards, student participation analytics, an email tool and a grade book.

2.2 Discussion forum^{15,18}

Online discussion needs goals, structure and a purpose tied to the learning objectives of a course. The discussion is what builds cognitive presence, and is part of the Community of Inquiry (CoI) model. Cognitive presence is an essential component to learning, according to this model for online learning,¹⁷ allowing for the construction of new knowledge. A thread is created with an open question on the concept of the course being taught, to elicit ideas,

opinions, lateral thinking on the proposed thread. While you share your ideas in brief, biggest advantage is when you learn from ideas of your peers and also try to argue with points on the ideas shared, and thus have virtual group learning.⁴

Remember:

- Take interest and focus on the discussion.
- Write clearly and with expression.
- Communicating online allows your personality to come through. Little humor is effective and at times relevant in discussion. Make sure to avoid sarcasm
- Be supportive, considerate and constructive when replying to your classmates.
- If you disagree with a classmate, please respond in a respectful and tactful manner.
- Keep your post focused on the topic, relating any class readings and materials from the current module in your post.
- Proofread and review your response before hitting the submit button
- Participate regularly. Improve your learning by being an active and engaged student.
- Successful students follow and participate in the assigned discussion throughout the module, logging on at least three times a week while reading and participating in forums as assigned in the module.
- As the program progresses, you'll get better at pitching your ideas and making strong, succinct, professional arguments through text.

2.3 Engagement

Online learning, partially means on-your-own. You are in class with other students and an instructor who all have much to offer. Reach out to them, communicate with them, and learn from them. You have access to a diverse population that has something meaningful to contribute—take advantage of that. Friendships formed in class can



provide a great deal of support and motivation to you outside of the class. While you and your classmates will differ in geographical locations, occupations, even culture, you all have one thing in common—your desire to obtain a quality education through online learning. So get to know your classmates, they will prove a vital resource to you and you to them.

In the future, the virtual classroom is expected to expand to advanced technology like artificial intelligence (AI) and virtual reality (VR). As the online teaching system expands, it is expected to see more innovation in terms of emerging technologies benefitting the learners. While AI and VR are evolving, they are on their way across the eLearning platform in the years to come.

2.3.1 eLM, Videos, Links, animation, simulations, virtual labs.

Self-Learning e-Module for Online mode means a modular unit of course material in e-learning form which is inter alia self-explanatory, self- contained, self-directed at the learner, and amenable to selfevaluation, and enables the learner to acquire the prescribed level of learning in a course of study and includes contents in the form of a combination of the following e-Learning content, namely:- (a) e-Text Materials; (b) Video Lectures; (c) Audio-Visual interactive material; (d) Virtual Classroom sessions; (e) Audio Pod casts; (f) Virtual Simulation; and (g) Self-Assessment Quizzes or Tests, etc,.

Online teaching systems are Omni-synchronous with the ability to deliver online classes with live streaming. It can be a live chat room or a live conference call and delivering live learning to students.

2.4 Video

Visual has always an impact. Small timed independent videos do help as nugget capsules to capture concepts easily. They can be seen any time and thus satisfy the current trends of short time learning and



practices of micro learning. These can be concept based, case based, some work out models, where animation has significant impact to convey the concept, in addition to online video lectures.

2.5 Assessment/Evaluation

UGC guidelines recommend a 30% formative assessment and 70% end semester evaluation. The formative as well end semester will also be online. Thus learner needs to gear up for answering online using mobile, DTP, iPhone etc.

2.6 Tools

Embracing technology is also crucial to utilize various services of LMS, Videos, Discussion forum. The standard tools list includes:

- 1. iPad/DTP
- 2. Cordless Keyboard and Mouse
- 3. Wireless Router
- 4. USB Hub
- 5. Webcam
- 6. Note Pad
- 7. Desk Organizer
- 8. Head Phone
- 9. Good bandwidth
- 10. Zoom/Skype/ Google meets or another set of connecting platforms, learner needs to get familiar with as lot of break out room concepts, online questionnaire like Kahoot, Menti, filling forms through Google are very common.

3. Advantages^{5-7,13,16-20}

While there are many advantages of online learning to both Academic institution and the learner, we will focus on the learner here.

- 3.1 Added Flexibility (read at own time, own pace, what you select)
- 3.2 Better Time Management (can plan and schedule, taking



contingence of over all pending activities)

- 3.3 Demonstrated Self-Motivation (keeping up with course flow, answering discussion forum, quizzes prove the self motivation to achieve the desired)
- 3.4 Improved virtual Communication and Collaboration (Opportunity to share with faculty, peers, ideas, through discussion forum, making peer group of liking etc)
- 3.5 A Broader, Global Perspective (since other team members can be from varied background, culture, places, chance to get to know and develop a global perspective). It expands professional network
- 3.6 New Technical Skills (using latest tools, technology for learning enriches with new technical skills)
- 3.7 Lower costs (Online courses or free or at lower cost than regular courses)
- 3.8 Wherever, whenever, whatever: (Location independent, time independent, learn the chosen course). This puts you away from dreaded commute.
- 3.9 A large variety of courses to choose from (Course era, SWAYAM, eDx. Udemy, and approved Universities in India ...)
- 3.10 No Boundaries (Since no physical travel and presence, can opt courses from globally renowned universities, and learning institutes)
- 3.11 Better opportunities to concentrate (As learning schedule is prepared by learner, can concentrate better on the reading material)
- 3.12 Can customize your learning environment, and the ambience to study (not the physical class room)
- 3.13 Enjoy a flexible schedule: The entire scheduling of preparation is on leaner's hand. (She) can dynamically adjust to ensure the fulfillment. This develops you as a professional with self disciple and accountability
- 3.14 It's eco-friendly: Since online has complete electronic material, if

the learner can learn to read from system without printing, it's really contributing to green revolution

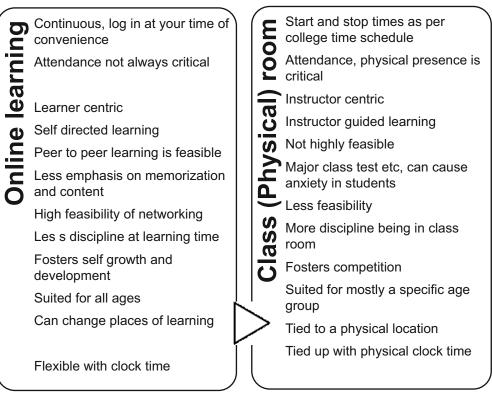
- 3.15 Subject discussions: The discussion forum is a great platform to have joined virtual study groups, helping group learning and group thinking
- 3.16 Can review course materials repeatedly :unlike a physical class , where the teacher finds it difficult to exactly rewind what he taught both for lack of time and repeating consistency of content previously shared. In online, the learner can rewind every study material for reinforcement in learning.
- 3.17 Zoom and Google Meet sessions can be recorded to either be viewed or listened to again (and again). These are just a few ways that the online classroom can allow for easier, more adaptable communications between teacher and student for optimal learning
- 3.18 Learn at your own pace: The above advantage leads to learning at own pace.
- 3.19 You'll develop great self-discipline : Everything done by self planning, definitely a lot of self discipline can be achieved
- 3.20 Multiple ways to communicate with your professor: In physical class either paucity of time, or your own inhibition, do not let you raise your questions and views freely with your professor. But in online, yourself and professor being a single homogenous communication group, can be freely sharing the views and queries to get feedback and have Q and A sessions. This provides Multiple opportunities for teacher-student interaction
- 3.21 Better opportunities to concentrate As you are not tied down by the times of classrooms like 9-4, you can choose to study at any place that helps you learn the material to gain a greater understanding of the overall body of knowledge, to earn your degree. Online classes are a real game changer because they reduce all of the distractions that come with the traditional, inperson classroom, making it easier to focus and learn
- 3.22 Customize your learning environment Whether you're at home,



on the road or at a friend's house, you can create your own perfect space to study class materials and do homework

- 3.23 Assignments. You don't have to put up with anymore disruptive environments like crowded libraries. Online learning offers better opportunities to concentrate by not being around other people. You can dedicate one room for quiet study, or if you're shy, you don't have to worry about interacting with other students. It reduces your academic pressure
- 3.24 Online classes keep you on a regular schedule of making and meeting deadlines, allowing you to practice managing your time and staying productive week-to-week. Employers often appreciate the time management skills needed to complete an online degree program and view these skills as a valuable asset in potential employees.
- 3.25 You prove to employers that you are self-motivated, go after things that interest you, and seek new opportunities and ways of doing things. The more you put your heart into it, the more success.
- 3.26 This sort of self-paced and self-motivated learning demonstrates to future employers that you have the ability to think critically and overcome any obstacles that might stand in your way (as this is one of the bases for continued learning as part of Learning and Development).
- 3.27 Your online degree also equates to strong technical skills, a definite plus for any job seeker. As part of your coursework, you will likely need to utilize digital learning materials, get familiar with new tools and software, and troubleshoot common issues. An employer could trust that you are versed in common collaboration tools, content management systems, and basic troubleshooting.

A quick comparison



4. Get prepared

- Learner needs to be self motivated, have best time management
- Need to get complete confidence on using online learning technologies and platforms for self paced learning
- Plan approaches to interactive collaborative learning, participating online with peers
- Shall use all possible platforms to interact with teaching staff and be in constant touch with them
- ✤ Need to equip with infrastructure like UPS, camera, good bandwidth at learning place

• Psychologically be prepared to be an independent learner. Independent learners look to learn from situations around them, they look to learn from people around them, and they never make the excuse that there is nothing to be gained from a situation, even if the situation



is one they have experienced before.

- Taking responsibility for the learning process : An independent learner will inherently take responsibility for the learning process. They are not expecting a parent or guardian to push them along. They are not expecting the teacher to spoon feed answers to them. They expect to push themselves in their academic process and use the resources provided as a guide for learning. This is a characteristic that is needed at the collegiate level, and possessed by employed group.⁸⁻¹²
- Needs better goal orientation: Students who can follow the instructions, complete the work as asked, and move on to the next assignment are just accomplishing mini goal after mini goal

5. Conclusion

The online learning definitely promises benefits to the learners. The time has come to realize that, online learning is going to be the medium of future learning and will play highly significant role at school/college learning/Higher education, while it has already been playing significant role in L and D (learning and development) of corporate world. The debate no more is for: whether it is beneficial or not. Every learner needs to understand the modalities of online learning at all stages of the education and adapt to it for getting the benefits. Move away from certificate oriented learning to learning for intellectual enlightenment.

6. References

- 1. Online learning: <u>https://deb.ugc.ac.in/DEB/OnlineLearning</u>
- 2. <u>https://tophat.com/glossary/o/online-learning/</u>
- 3. Five Essential Elements of High Quality E-Learning Courses: https://blog.commlabindia.com/elearning-design/quality-elearning-courseelements
- 4. https://www.thetechedvocate.org/online-learning-elements/
- 5. Advantages Of Online Learning: Education Without Leaving Home :https://elearningindustry.com/5-advantages-of-online-learning-educationwithout-leaving-home

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- 6. <u>The Benefits of Online Learning: 7 Advantages of Online.</u> <u>https://www.northeastern.edu>graduate>blog>bene</u>
- 7. 13 Great benefits of online learning:https://www.straighterline.com/blog/34-top-secret-benefits-of-studying-online/
- 8. <u>https://pinlearn.com/characteristics-of-the-online-teaching-system/</u>
- 9. <u>https://learn.canvas.net/courses/2425/pages/common-attributes-of-online-learning</u>
- 10. https://www.cmich.edu/global/cmuonline/about/Pages/characteristics.aspx
- 11. <u>https://achievevirtual.org/blog/online-high-school/characteristics-online -</u> <u>learning-success/</u>
- 12. <u>https://citejournal.org/volume-7/issue-3-07/general/the-online-learner-</u> characteristics-and-pedagogical-implications/
- 13. <u>https://www.northeastern.edu/graduate/blog/benefits-of-online-learning/</u>
- Schunk, Dale H., 2012, Learning Theories, An Educational Perspective <u>https://www.ugc.ac.in/pdfnews/221580.pdf</u>
- 15. How to Get Students to Participate in Online Discussions, JUNE 22, 2012 ~ DEBBIE MORRISON:<u>https://onlinelearninginsights.wordpress.com/</u> 2012/06/22/how-to-get-students-to-participate-in-online-discussions/
- 16. <u>https://elearningindustry.com/5-advantages-of-online-learning-education-</u> without-leaving-home
- 17. https://www.straighterline.com/blog/34-top-secret-benefits-of-studying-online/
- 18. <u>https://kajabi.com/blog/top-20-advantages-of-online-learning-and-digital-</u> <u>courses</u>
- 19. https://www.eliteprep.com/blog/6-benefits-of-online-learning
- 20. https://hospitalityinsights.ehl.edu/advantages-of-online-learning

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जल ज्योतिर्मय आँचल है

प्रेम प्यारी गुप्ता,विज़िटिंग फैकल्टी, डी०ई०आई० इन्फॉर्मेशन सेन्टर, रूड़की

घिर घिर आये मेघ सघन, आया मास मुबारक सावन चौधारा बरसा अमृत रस, जलमय हो गये धरन गगन ज्ञान ध्यान का मौसम आया, अध्ययन चिंतन में डूबा मन रसवंती हुई सृष्टि सारी, वर्षा का वंदन अभिनंदन

वर्षा ऋतुओ की रानी है, इसकी शोभा अजब निराली मेघों के रथ पर चढ़ आई चाल ढाल अनुपम मतवाली जलतरंग सी रह रह बजती, पात—पात बूंदों का नर्तन पायल छमछम रुनझुन बजती, खनक रहे इसके कंगन

दस्तक देती खिड़की पर आ, भोर अंधेरे सांझ सवेरे डाल—डाल पर पात—पात पर, रिमझिम पड़ती हैं बौछारें जल पूरित हुई वसुधा सारी, फूल खिले गुलशन गुलशन मन की माटी भीग रही है, पोर—पोर बस गया मधुबन

वर्षा ने दिए खोल खजाने, नदियां बहतीं अविरल निर्मल धारा इनकी प्राणदायिनी, चिरजीवी हो इनकी कलकल तटपर ऋषियों के तपस्थल. भक्ति—ज्ञान वैराग्य के दर्पण नित प्रति तट पर पोषित संस्कृति, धर्म कर्म जीवन का दर्शन

नदियां धरती को सिंचित करतीं, विकसित हुई सभ्यतायें बनी रहें यह अन्नपूर्णा, सदियां चाहे आयें जायें जल ही जीवन जीवन ही जल, रोकें हम इसका शोषण धरती का श्रृंगार है यह जल, कुदरत का आशीर्वचन

जल ज्योतिर्मय वह आँचल है जहां, खिला यह सृष्टि कमल है जल के बिना सभी कुछ सूना, जल संबल है धरती जीवन यही प्राणमय अंतर्धारा, बने बसुंधरा सुजला सुफला दूर करे सब कष्ट अमंगल, औषधि रामबाण संजीवन

जल बिन सब संस्कार अधूरे, जल का करें संरक्षण पोषण जलमय है जग जीवन सारा, पूजनीय यह अमृत धारा नित प्रति है वंदन अभिनंदन, आया मास मुबारक सावन रसवंती हुई सृष्टि सारी, वर्षा का वंदन अभिनंदन

<u>ऋग्वेद से साभार</u>

" शिक्षा का उद्देश्य मात्र जीविकोपार्जन नहीं है, और ना ही मात्र सोच विकसित करने या नागरिकता सिखाने का आलय है। वह तो आत्मा की वास्तविकता से परिचय कराने के लिए, और मानवीय आत्माओं को सत्य की

खोज और नैतिकता का अनुपालन करने का प्रशिक्षण देने के लिए है।'' डॉ0 सर्वपल्ली राधाकृष्णन

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<u>The Current Status of Online Education in Higher</u> <u>Education</u> V.B. Gupta, Coordinator, Distance Education Programme DEI (Deemed-to-be University)

At DEI we have recently been pursuing the concept of supervised online education. A review of the literature shows that online education is fast becoming an integral part of higher education, particularly with accessibility of the internet on a global scale. In this write-up, an attempt will be made to provide a limited global flavour of the current status of online education.

In this context, two volumes on Open & Distance Education published in 2018/2019 by Springer open [1, 2] contain useful data. In volume II [2], the opening chapter on "The State of open and distance education" [3] has a section entitled 'The Ascendance of online education' which states as follows:

The book chapters reveal that there is a substantial movement towards online education by Open & Distance Education (ODE) providers. This is not universal. Distance Education (DE) is not the same as online education. Forms of DE, other than online education are still important. One can draw a spectrum of the type of ICTs used to deliver ODE based on the descriptions provided for each country in the books.

.....Several countries like South Korea, Australia, Canada and the United States have moved heavily into online education, almost to the exclusion of correspondence education. Other countries like India, China and South Africa are still strongly committed to correspondence education and the use of broadcast radio and television for distance education. Some DE providers continue to be committed to correspondence education not because they are opposed to online education or because they are risk-averse. First, it is not feasible to move towards online, mobile or other digital-based distance education delivery. Uneven access and use of the internet persist, despite increased connectivity in most countries.The internet is used

regularly by nearly 80% of people in Europe and by over 20% of people in Africa.

On aggregate, nearly 84% of people in developed countries and 41% of people in developing countries were using the internet. Access to the internet varies in important ways that make it a poor choice, and at times prohibitive, for distance education provision in many countries.

Second, many ODE institutions have long running infrastructure that supports correspondence and broadcast education. The challenge is how to decide what formats to use for course production and delivery when there are so much sunk costs for existing formats. For example, the University of South Africa, the largest DE provider in South Africa, has huge buildings for printing course materials. Any financial calculation about future programs needs to include these legacy infrastructures that may make it more financially beneficial to continue with correspondence education. But sunk costs are also an issue for online education. There is a prohibitive cost of transferring to, for example, a new learning management system

Later, under the heading 'Growing Competition in ODE', the authors state:

Over 80% of higher education institutions in Europe offer online courses to distance students The numbers are similar in the United States. Of the institutions with more than 1000 students, more than 80% of them offer distance education courses....... In Canada and the United States, on-campus institutions are the largest providers of distance education, in the form of online education......, In China, high profile campus-based institutions like Peking University, Nanjing University, Sun Yat-Sen University, Beijing Normal University and the Harbin Institute of Technology all offer online education programs. Similarly, in South Africa, the University of Cape Town, which regularly ranks first among universities in all of the African continent, has moved into offering online distance education since 2014. For decades in Russia, most higher education institutions

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have had distance education units, next to their "direct departments", historically offering correspondence courses. These universities are now some of the main providers of online education.

In the chapter on 'Distance Education in Australia, Europe and the Americas' [4], the authors state:

In Australia, Canada, the United States and the United Kingdom, ODE is now nearly synonymous with online education. In Brazil, online education has become what mobile phones have become in many countries, a leapfrog technology. Leap-frog technologies allow countries to leap over generations of technology that require infrastructure (e.g. landline phones), to a more recent ICT. This allows for superseding the old infrastructure requirements. Online education is a leapfrog technology for DE. Instead of investing in broadcast or videoconferencing systems infrastructure, countries can focus on cellular and broadband infrastructure. While there are cautions about leaving correspondence, radio and other forms of ODE - especially to provide access for people in underdeveloped regions - certainly the growth in ODE seems to be based on online education. With the development of online learning, ODE clearly moved into the mainstream of higher education systems.

Later, under the heading Trends and Future Challengers, the authors state:

On a macro level, open and distance education is being affected by two major factors: the global growth in demand for education and the digital revolution. Notably, there seems to be less influence on ODE from globalization - the increasingly borderless economic and social exchanges. ODE still seems to function mainly, though not wholly, within a nation state. There is not much indication that non-domestic enrolments constitute a large percentage of ODE demand. There are two exceptions. In the United Kingdom, out-of-country for-credit enrolments in ODE may be as large as internal demand. Secondly, there is substantial out – of – country enrolments in many countries for non-credit ODE, such as MOOCs.

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This is followed by the following advice given by the authors to distance education providers to be eternally vigilant:

Finally, ODE will likely continue to change shape as the digital transformation of higher education expands. This poses an existential challenge for conventional distance educators. As the popularity of ODE has grown in most countries on the demand and supply side, and digitization has created a convergence between on-campus and online education, it has asked if distance education is ending. Likely ODE will continue to be important, if only because there are still students who will continue to be under-served by conventional education. However, distance educators cannot be complacent. They will need to address ongoing changes of new ICTs, the expanded competition of new entrants and increased demand for a quality educational experience in open and distance education.

Having gone through a quick survey of the status of online education in some countries of the world, we will take stock of the situation in USA, UK and India in greater detail.

Kentnor has described the evolution of online learning [5] as follows:

Online education is defined as a form of distance education that uses computers and the internet as the delivery mechanism, with at least 80% of the course content delivered online. The use of computers to education arose in the corporate arena during the 1980s as companies used computer-based programs to train new employees. Online education programs emerged in 1989, when the University of Phoenix began using CompuServe, one of the first consumer online services. Shortly thereafter, in 1991, the World Wide Web (Web) was unveiled, and the University of Phoenix became one of the first to offer online education programs through the Internet. The University of Phoenix's move towards the online educational marketplace prompted many reputable institutions and not-for profit colleges and universities to follow suit. The Alfred P. Sloan Foundation (Foundation), a respectable philanthropic, not-for-profit grant-making institute, developed the Asynchronous Learning Networks (ALN) in 1992 to explore education



alternatives for those unable to attend traditional classes in the classroom. As online education continued to grow, the Foundation also began funding institutions that offered online programs in an effort to improve the quality of online education. The vision and effectiveness for this new medium of distance education was apparent, so it was only a matter of time before academia entered the market. Universities and colleges began experimenting in online courses in the early to mid-1990s.

Beaudoin has traced the growth in enrolment in higher Education in USA [6] as follows:

In the 2000s, enrolment in all (4100+) post-secondary institutions increased from 16.9 million to 20.4 million, including online enrollments of 46% in public institutions and 42% in for-profit colleges. In 2010, University of Phoenix had the largest online enrolments (380,000), equalling combined enrolments of the next 9 largest online institutions. The University of Phoenix where online learning emerged in 1982, had enrolled 94,724 students in the year 2019. The methods of delivery used by them include both asynchronous and synchronous leaning modes with web conferencing and video chat platforms also being used (Wikipedia – 28^{th} July, 2020). The University has had a chequered history and as per Wikipedia it has paid hundreds of millions of dollars in fines and settlements concerning its student recruiting practices and education programmes. The university is ranked among the lowest in USA.

Let us now consider the situation in the United Kingdom. According to Gaskell [7], the overall UK picture is of online, distance and e-learning (ODeL) gaining increasing respect and acceptance. It was in the year 1969 that the Open University (OU) was launched in the U.K. As pointed out by Gaskell:

The OU pioneered entirely new methods of teaching and learning at a distance, many of which have been adopted world-wide. Multi-media course materials included high quality printed teaching units, radio programmes, TV programmes (broadcast originally at peak viewing times)

and Home Experiment Kits for those studying science subjects. In addition, there was a comprehensive network of student support established through 13 Regional Centres which appointed local tutors and support staff and organised local tutorials, exam centres and degree ceremonies.

Developments in ODeL from the 1990s transformed distance teaching in the UK in two main ways. Firstly through the introduction of online platforms for administrative and student support and the provision of some teaching resources which have now been adopted by all UK HEIs. Online support in these areas varies, but can enable learners to access teaching materials and recorded lectures online, undertake all administrative matters, and engage with fellow students, and in some cases tutors/lecturers, via forums, email and messaging boards. Secondly, while there are still universities like Oxbridge that emphasise the importance of face-to-face contact, there are increasing numbers of modules or courses, particularly at Masters level which are taught exclusively online or at a distance.

Finally, we move on to India. On 15th August, 2021, The Times of India, New Delhi / Agra edition carried a report entitled 'Demand for Online Learning on Swayam soars as enrollments cross 1 crore in 2 years.

With more than 1 crore enrolment in less than 2 years, the government's online e-learning platform Swayam (Study webs of Active Learning for young aspiring minds) is reported to have seen a massive jump in demand as Higher Education Institutions (HEIs) were forced to rely on online teaching due to the Corona – Virus Pandemic.

The Newspaper report further stated' that around 1.1 crore enrolments took place on the platform between July 2019 and January 2021. An average of 27.44 lakh joined courses every semester since 2019 to study in courses offered by some of India's top institutions such as IITS, Indian Institute of Science, Banaras Hindu University and IIMS. Enrolment in courses is expected to rise with the approval of credit transfers upto 40% from online courses towards the completion of degrees. Around 149 universities, including 26 central universities and 48 state government-



run universities will accept credits received on Swayam from 2021.

Secretary for higher education at the ministry of education Amit Khare credited the new National Education Policy with facilitating the rapid growth of online learning.

"Soon students will be able to take any courses from the choice of their institutions, earn and deposit credits and complete their degrees. And ultimately the day is not far when they can take courses from any universities and earn their degree from a virtual university, which is basically an aggregator of courses offered by different institutions. It is at a conceptual stage right now but that day is not far," he said.

Khare added that though Covid hastened the pace, "ultimately it's the new National Education Policy which facilitated the developments. The first step being allowing up to 40% credit via online courses, followed by UGC allowing 100 top universities to offer full online degree programmes. Now with the launch of Academic Bank of Credits will bring in transformational changes in the education landscape. Soon students will be able to take any course from the choice of their institutions, earn and deposit credits and complete their degrees."

The number of students getting certified, or earning credits, has tripled since July 2018. Around 70,000 took the exams and nearly 65,000 qualified per semester in 2018; the number rose to nearly 2 lakh taking the exams in 2019 and 2020. An estimated 1.8 lakh students were certified per semester during this period.

The number of courses offered on the online platform has more than doubled since 2017. There were 323 courses available in July 2017, which grew to 876 in January 2021.

To conclude this account of online learning, two extremely relevant and important points made in a recent publication [8] are worth pointing out:

(I) Teaching online does not mean simply recording a traditional lecture and posting it to the web or using a videoconference platform to deliver the same lecture online as the instructor would

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give on campus. Effective online education requires teaching and learning methods that engage students dynamically in an enjoyable and stimulating education experience. The pandemic has presented a great opportunity to scale up innovations that enable many active, interactive, and experiential modes of education delivery. Among these student-focused approaches are problem-based learning, self-learning, peer learning, team learning, the flipped classroom, and the use of simulations all of which can be used separately or in combination.

(ii) Learners and teachers should have access to a wide range of highquality, multimodal resources that support the shift to better pedagogical practices. The development of open-source education software with high-quality content has facilitated the process of identifying and sharing relevant learning materials. Interactive, adaptive digital resources can enable the shift to personalized learning by providing relevant content based on learners' level and progression. Technology could support better teaching, for example by allowing teachers to continuously assess student's learning and deliver individualized instruction. Big data and machine learning tools can help assess each student's level, map competencies, and track progress in open learning systems to provide personalized, high-quality digital content, facilitating the use of student-centered pedagogical practices that support learning in the school and beyond.

References:

- 'Open & Distance Education (Volume I) in Australia, Europe and the Americas'. Edited by Alan Qayyum and Olaf Zawacki Richter, Published in year 2018 by springer open.
- [2] 'Open and Distance Education (Volume II) in Asia, Africa and the Middle East', Edited by Olaf Zawacki Richter and Adnan Qayyum, Published in 2019 by Springer Open.
- [3] Qayyum A and Olaf Zawacki Richter, 'The State of Open and Distance Education' in Vol II Reference [2].



- [4] Qayyum A and Olaf Zawacki Richter, Distance Education in Australia, Europe and the Americas in Vol I (page nos. 21 to 31).
- [5] Kentnor Hope E, 'Distance Education and the Evolution of online Learning in the United States', Curriculum and teaching Dialogue, Vol 17, no. 1 and 2, 2015 (page nos. 21 to 31).
- [6] Beaudion Michael <u>United Stated of America</u>, (page nos.103 to 116) in Vol I (Reference [1]).
- [7] Gaskell Anne, United Kingdom (page nos 85 to 100) in Vol I Reference [1].
- [8] Covid–19 Learning Loss in Higher Education: A Report by Team Lease Ed Tech, July 2021.

* *

Science is not only compatible with spirituality; it is a profound source of spirituality. When we recognise our place in an immensity of light-years and in the passage of ages, when we grasp the intricacy, beauty, and subtlety of life, then that soaring feeling, that sense of elation and humility combined, is surely spiritual.

Carl Sagan

<u>Permaculture, zero-tillage and Agro-homeopathy - the</u> <u>trinity of sustainable farming practices</u>

V. Huzur Saran, Centre In charge, DEI Information Centre, Roorkee And V. Guru Charan, D.E.I. alumnus

Agro-Homeopathy based Organic Botanical HerbAl Garden (AHOBHAG), established about two years ago at the D.E.I. Information Centre, Roorkee, is being maintained by the joint efforts of the staff and students, under the able guidance of our faculty, Mrs. V. Radha Kumari. Presently, this self-sustained ecosystem has an assortment of around seventy herbs and medicinal plants. The project was conceptualized and initiated by Dr. V. Guru Charan, an alumnus of D.E.I., under the practical component of the innovative core courses of D.E.I. on agriculture, social service, environmental science and entrepreneurship. A majority of students belonging to rural areas and farming background motivated us to initiate this endeavour. The remarkable enthusiasm and curiosity shown by the students and staff since this initiative was undertaken, has encouraged us to further extend it to include other state-of-the-art techniques.

According to the 10th Agricultural census, small and marginal farmers account for 86% of all farmers in India. Such farmers can hardly afford expensive agricultural inputs. Moreover, traditional organic farming practices involving manufacturing of organic pesticides and herbicides on farms can be a cumbersome process, which may further dissuade the farmer from adopting such labor intensive farming techniques. In 2016, the Hon'ble Prime Minister of India had set a highly ambitious target of doubling farmers' incomes by 2022. An inter-ministerial committee on "Doubling of Farmers' Income" was set up in April 2016 to recommend strategies to achieve this goal. The techniques discussed herein would particularly be helpful in this endeavour.

A humble effort has been made at our centre campus, to develop a selfsustained herbal forest employing permaculture and agro-homeopathy techniques. The initiative named PeRmaculturE Medical Forest And Garden (PREM FAG) is developed in consonance with the principles of the "trinity"-permaculture, zero-tillage and agro-homeopathy. The above practices form a cost effective, environmentally sustainable and complete system of organic farming.

Permaculture, according to Oxford Learner's Dictionary, is defined as "an approach to life and growing food that copies the way things happen in nature in order to create ways for people to live without damaging the environment". It can be considered a paradigm of systems thinking, which is being used for growing urban forests and food forests around the globe. The aim is to create systems that are ecologically-sound and economically viable, which provide for their own needs, do not exploit or pollute, and therefore are sustainable in the long term. As an experiment, permaculture techniques have been implemented on a small plot of about 125 sq ft. in our centre, where around twenty different species are growing densely-spaced. The plant species include Akarkara, Aloe Vera, Guru Samkru, Lata Kasturi, Lemon grass, Kala Vaasa, Kalmegh, Safed Vaasa, Shal Parni, Tulsi, etc.

Zero-tillage farming is being practiced here to maximize production and minimize human effort and the damage to soil biota, which is ultimately responsible for fertility of the soil. In zero-tillage farming, there is a strong emphasis on mulching, to reduce weeds and water consumption, and improve the soil quality. Using zero-tillage principle results in negligible disturbance of the soil biota, which preserves the topsoil and the biodiversity. This is a win-win solution as the farm starts generating zero net waste, since all the organic waste is used to form mulch or compost.

Agro-homeopathy is a completely safe and cost effective protocol to treat plants and maintain the ecology of the environment. It is being used very effectively to control pests and unwanted weeds. Recently, live homeopathic nosodes of soil and aphids potentised to 6th dilution, have been locally developed at the centre. The homeopathic soil nosode prepared from the local soil is used to aid the growth of the plants. In this regard, we have been fortunate to receive expert guidance from topmost international doctors of agro-homeopathy.

Based on the above concepts, a keyhole garden has also been established at the centre. As the name suggests, it is essentially a raised-bed planter in the shape of a keyhole. It can be built on a small space with a composting bin at its centre. The kitchen waste and water are periodically filled in this bin, which decompose and release vital nutrients to the plants. The aim is to demonstrate the utilization of small urban spaces for growing plants organically with minimum effort. Keyhole garden uses considerably less water compared to a conventional garden and may be sufficient for



fulfilling food requirements of a family. Also the raised bed of the garden facilitates ease of tending to the garden. As the soil is extremely nutritious, it enables plants to grow closely spaced and with higher yields.

Our centre has the rare distinction of being the first in the country to employ all the three protocols of permaculture, agro-homeopathy and zero-tillage simultaneously in establishing a herbal garden, as a proof of concept for the agrarian community at large. It also demonstrates that this concept can be conveniently adapted and adopted anywhere, from large farms to roof-top gardens and kitchen gardens.

Besides, elements of other best practices in organic farming from around the world such as Korean natural farming and biodynamic farming are also being adopted. Korean natural farming takes advantage of indigenous microorganisms such as bacteria, fungi, and protozoa to produce fertile soils that yield high output without the use of pesticides.

Additionally, an organic home-made fertilizer named "weed tea" has been prepared and tried on herbal plants at our centre. The fertilizer "weed tea" is prepared by submerging grass clippings and chopped plants in water for about two weeks. Another method called BD 500 (biodynamic cow horn manure) is basically fermented cow dung. It is the basis for soil fertility and the renewal of degraded soils. It is buried in October/ November and lifted after four months. Thus the rare combination of above environmentally sustainable "trinity" could be an effective strategy both for small and marginal farmers to grow crops not only healthy and pest-free, but also cost-effective and chemicals-free. Moreover, these techniques along with the keyhole gardening could be equally useful for the home gardeners.

References:

- 1. DEI-DEP news, Vol.8, No.6, July 2020
- 2. <u>www.wikipedia.org</u>
- 3. <u>https://agritech.tnau.ac.in/org_farm/orgfarm_biodynmic_prep5</u> 00.html

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<u>नैनों का जाद</u>

स्वामी प्यारी कौड़ा, 4 / 64, विद्युत नगर, दयालबाग़, आगरा

तेरे नैनों की छुअन का नशा यों छा गया। विस्मृत कर मुझे जग से न्यारा बना गया।।

उन नैनों में था प्यार, ममत्व और दया का सागर। पाकर उसकी एक झलक जीवन मेरा संवर गया।।

संसार के झमेलों से उलझकर थक चुकी थी मैं। पल भर का दीदार तेरा सबसे सहज छुड़ा गया।।

ना सुबह की फिक्र है, ना रात ही की चिंता। तेरा दीदार पल भर में अपना बना गया।।

काल माया ने घेरा था हर पल कस कर मुझे। तेरे नैनों का जादू मुझे उनसे बचा गया।।

* *

"Faith is the bird that feels the light and sings when the dawn is still dark."

Rabindranath Tagore

Importance of Religion in Human Life

R.K. Sharma, Mentor (MVM – 4W), DEI Information Centre, Meerut

Science is the study of and knowledge about the physical world and natural laws. Biology, Chemistry, Physics etc. form the subject areas of science.

Science is an intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation. For this it uses the methods of observation, measurement, data collection, and mathematical tools.

Science is not absolute truth. It is instead our search for what we believe is very close to ultimate truth.

Science is about finding new things, unexpected things and making mind-blowing discoveries pertaining to the world.

Britain's Science Council has given a beautiful definition of science – "Science is the pursuit of knowledge and understanding of the natural and social world following a systematic methodology based on the evidence".

The aim of teaching and learning of sciences is to encourage and enable human beings to develop enquiring minds and curiosity about the natural world, acquire knowledge, conceptual understanding, and skills to solve problems and make informed decisions in scientific and other social contexts.

The goal of science is to learn how nature works by observing the nature and physical world and to understand this world through research and experimentation. Many researchers agree that the goals of scientific research are description, prediction, explanation/

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understanding and control.

Prior to 21st century, scientists, in general, avoided discussing about religion. All existing religions are truly one. Their teachings are to uplift the human beings spiritually, socially and physically.

Discoveries of Science have elevated man physically and mentally but not spiritually.

People of the west in general consider worldly progress and comforts as the object of life and have considered spiritualism secondary. They forget the real object of life.

Religion speaks about ultimate Truth and ultimate Reality. Religion teaches us "Fatherhood of God and brotherhood of man" and faith in Vasudev kutumbkam. It is awareness or perception of an inward spiritual truth –intuitively perceived knowledge of something in one's inner self.

The study of religion encompasses a wide variety of academic disciplines including theology, comparative study of religion and social scientific studies.

The aim of religion is the redemption of human beings. The object of life has set to be Atma-Darshan (Self-realization), but unfortunately the masses have forgotten the real object of life.

Radhasoami faith prescribes the way of devotion (Bhaktimarg). Greatest importance is attached to love for the Guru and love in His Holy feet. Detachment from the world automatically comes to one who adopts the way of devotion.

We have to understand that this world is not our home and that we shall not continue to live here forever. We have come here as travelers sitting in a particular railway compartment. This compartment is not our home but as long as we have to sit in the compartment, we should



keep it neat and clean and as long as we do not reach our destination we should behave carefully and cautiously like travelers. Our destination is the Abode of the True Supreme Lord. We have to engage in selfless service, performing spiritual practices with all our heart, so that we may get admission into His Abode. As long as the journey continues Wisdom lies in accepting the pains and pleasures of the world as they come and in acting according to the laws of the world as far as possible and thus pass our days happily.

In other words, we should neither get engrossed in the pleasure of the world nor should we escape from our worldly duties.

I would like to conclude that scientists have to join hands with Real Masters Who have realized the Ultimate Truth and are in a state of Pure Spiritual Bliss. When scientists combine this with the result of their scientific researches, they will discover Ultimate Truth and Reality.

* *

Your beliefs become your thoughts, your thoughts become your words, Your words become your actions, Your actions become your habits, Your habits become your values, Your values become your destiny.

Mahatma Gandhi

All your scholarship would be in vain if at the same time you do not build your character and attain mastery over your thoughts and your actions.

Mahatma Gandhi

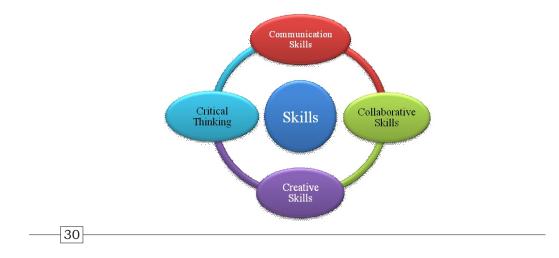
Education and Skills needed in Post – Covid Times

Sudha Lovely, Mentor, Core Courses, DEI Information Centre, Jalandhar

CORONA VIRUS, a dreaded respiratory syndrome, was identified in Wuhan City of China. It was declared a global health emergency on January 30,2020 and on March 20,2020 WHO declared it a Global Pandemic. Though the 21stcentury had suffered a huge loss due to the complete lockdown in different countries, yet it has led to many unique new technologies and abilities to be celebrated during these hard times too. The emergence of digital education in the age of internet paved the way for acceptance of online teaching –learning process. A key and a click on it has helped and encouraged the children and youth to know and adopt the new ways of life-style. Even the older generation shows interest in acknowledging the change for betterment.

In recent times, one thing that has become common in different sectors is the use of digital technology. Everyone has to learn a set of skills that could be beneficial to him as new-normal in the Post-Covid times. Everyone aspires to lead a fruitful life in society after getting education. True education implies learning a variety of skills along with enhancement of knowledge.

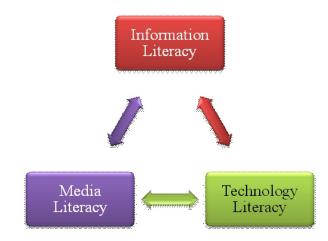
Skills can be summed up as shown below:



The 4-C's are interconnected and essential skills for further progress in numerous ways. The Communication Skills eliminate confusion in the teaching – learning process. One has to concentrate on active listening, confidence, friendliness, stress management, and nonverbal communication skills. The critical thinking skills, if adopted, help in finding solutions to those problems and also on how to convey ideas amongst the student's diverse mental abilities pinpointing the issue, collection of information, self evaluation, relevance, and drawing conclusions have to be learnt.

Creativity in innovations is required to see concepts in a different light. For this improve visual reading, alternative thinking, expanding vision and motivational advising has to be practiced. Collaborative Skills enhance working with others. Concentrate on open-mindedness, emotional intelligence, adaptability. Goals and their clear expectations are to be followed.

Now talking about literacy Skills, we have IMT



Information Literacy:

It teaches exploring and surfing the useful and latest knowledge to the learner. The information Technology can be explored through Literacy Skills. It includes planning, searching the web, evaluation,



literacy frequency, research and computer technology skills

Media Literacy:

It helps in learning critically to check credibility of the message in the age of social media.It identifies and helps to understand different types of media messages.

Technology Literacy:

It involves the use of latest applications that save time and provide accuracy in the teaching - learning while going online. How to utilise digital devices, computers, smartphones, tablets. Using emails, internet, cloud computing in academics as well as nonacademic surroundings and fields.

Life Skills



Flexibility:

It is the foremost of the life skills. It practices self discipline and attitude. Flexibility refers to developing ability to adapt to new situation, improvise economical methods for sustainability of long-term process.



Leadership:

It is very important for setting up of goals and to fulfil them. A sound planning is required.

Initiative Taking Skills:

It induces Self–confidence and improves one's potential by developing persistence. Finding balance of thought and mind by developing team mentality with positive attitude play an important role in one's life.

Social Skills:

It allows us to connect to the other people in an in-depth relationship, empathy, decision making, self awareness, coping with Stress and emotions. It enhances career development, encourages teamwork, responsibility, critical thinking, Life learning.

"Education is not merely a means of earning a living, nor is it only a nursery of thoughts or a school for citizenship. It is initiation into the life of spirit, a training of human souls in the pursuit of truth and the practice of virtue".

Dr. Sarvepalli Radhakrishnan

"Don't limit a child to your own learning, for she was born in another time."

Rabindranath Tagore

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LOCKDOWN EMOTIONS

Gargi Sood, Visiting Faculty, Information Centre, Bhopal

Silent I remain, as a mute witness.

For the sixth evolutionary phase,

Where it seems victory gears.

To change the Path,

Speeding uphill to be with the Lord.

By strengthening the inner voice to rejoice.

Today- "Humans are Still". Is that the nature's "will"?

Birds with their stretched wings,

Tweeting the messages of the Supreme Power.

It's high time, to redefine the moral universe.

It's high time, to learn that we are one.

It's high time, to conserve crumbling sapiens.

It's high time, to turn the chapters of the past.

To Intensify the tactile signals of life at last. It's high time, to reap the beautiful canvas of the Lord.

Flowers with varied hues, getting refracted because of floating tears of fears. Or

Because of Nano micro creatures. The COVID that has locked our dears.

Got chance to view beautiful blue sky,

Ornamented with pink moon amidst floating fluffy clouds.

Transparent air free from dust, aerosol and smoky party of yesterday.

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For once the fresh green leaves of the trees, Proudly swayed to their free will.

Without sooty grey layers,

Expressing happily their sheen.

Now it's time for homo-sapiens to introspect and answer the following queries.

Why we fail to perceive the gentler shades of warnings- In form of quakes, and tsunami of yesteryears.

Today, the insignificant invisible virus floating proudly wearing the crown of victory moving around with a tag of COVID 19

Yes, it's a wakeup call.

To emerge and thrive for future that is about to rise.

Stop measuring everything with "currency link".

Stop putting ideas, creativity and relationship on sale on a "sailing ink".

Why Antibiotics are at rage in an alarming pace,

Recall the viruses of the past that crossed the boundaries in a milder way.

It seems this is a call to redefine redesign our relations with nature for better future. Let the fading ink of the past shift from mono chrome to colorful lively-

Joyful era, full of divine aura. By restoring humanity and harmony for a while. With a standalone spirit of the time.

Mother earth and rivers played their role to nurture and cultivate homo sapiens potential. But we stood for-

Need versus Profit,

We versus I,

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Humble versus Arrogance,

Humility versus Pride, Power

versus Dominace.

Let us come together to unlock the gates for "Hope Filled Path".

Let us march forward holding the rising flame to awaken our dormant conscience.

Remember the world will never be the same.

Once we emerge from the current crisis, allow the spiritual strength to weave and repair the threats of human connection.

To Establish serene meaningful life with a new dawn. Let the Mars and Venus with the bright twinkling shine, Peep through the night sky to view,

The new world of share and care with determination. Let us sing together we shall overcome the doom's day for ever.

* *

A good teacher is like a Candle – It consumes itself to light the way for others. Ideal Teachers are those who use themselves as bridges over which they invite their students to cross. Then having facilitated their crossing, joyfully collapse, encouraging them to create bridges of their own.

Dr. Sarvepalli Radhakrishnan



<u>Waste – A Problem or an Opportunity?</u>

Aashina Arora, Visiting Faculty, DEI Information Centre, Karol Bagh, Delhi

Now you must be wondering, how waste can be an opportunity because waste is generally considered to be something worthless. We all think that waste is a problem and especially in a country like India because we are loaded with waste. But why not think positive and treat it as a blessing in disguise!

First of all, let's see what is happening to our world.

- Have you seen Delhi's garbage mountain? The landfill has risen higher than Taj Mahal.
- Bengaluru, which was once "City of Lakes", has turned to foaming lakes.
- Small Batteries, when dumped on the ground, burn up due to heat and produce harmful chemical gases which pollute water, air and soil.
- Deonar's dump yard in Mumbai has a height of nearly 18-20 floors.
- Arising from COVID-19, 1.56 billion masks had polluted oceans in 2020, claims a study. This is due to waste from used masks and PPE kits. If not disposed-off appropriately, it pollutes our water bodies. They can also infect the persons who handle them. Sometimes they go into incinerators and then pollute air.

The root cause of all this is? Yes, "Humans".We all are the reason behind this, some or the other way. But we are not here to discuss about the problems, we are here to find a solution or be a part of the solution. So, let's get started.

Know the difference and be part of the change!

Starting with the basics. We have <u>color coded dustbins</u> but we do not know which category of waste belongs to which bin.

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- Green bins are for biodegradable waste •
- Blue bins are for plastic and metal waste
- Black bins are for e-waste •

It will be easy if we consider it our responsibility and understand why proper disposal of waste is important.

- \geq We all use cartons, we get food, drinks and packages etc. in these. If we dispose them off properly, they can generate income for cleaners (Safai Karamchari). They sell these to scrap dealers and hence get employment by cleaning and sorting these cartons.
- \geq These cartons are then sent to recycling plant, where they are converted into sheets. These sheets are then used for making:
 - Furniture
 - Seat support in Rickshaws
 - Classroom benches
 - Toothpaste boxes
 - Roof of the house •

Be aware, innovative and creative!

We all studied this in our schools, the "3R's". This is the basis of waste management, and exactly where we have to start. We all know this by heart but don't know how to implement it and frankly we don't bother. But it's never too late. We can make a start now.

\succ First R is – Reduce

Reduce means to cut back on the amount of trash we generate. How simple is that, we just have to create less waste. And yes! It is possible. Just take baby steps.

- Instead of throwing old clothing, donate it.
 For newspapers, magazines, receipts, mails etc switch to their digital subscriptions or soft-copy versions.



 Old carton can be changed into classroom desk in a school – NGO in Mumbai (Aarambh) is using discarded cardboard waste to create school bags which unpack into small desks designed to improve the posture of children who are used to sitting and writing on the floor.

Second R is – <u>Reuse</u>

Learning a new way to use old and unwanted items instead of throwing them away – should be new you. Still not interested? You will be now!

- E-waste has valuable metals like- Copper, Gold, Iron etc. One Recycler in China recycled cobalt from e-waste, so much more than the entire country produces from it's mines the whole year. Now imagine the income generated and this is all from waste.
- Your mobile phones literally have gold in them. Checkout "Archimedes Channel" on YouTube, it shows you how to recover gold from old electronic items. Imagine how much e-waste you can recover from your home or your area and then scientifically dismantle the components and convert it into a business.

> Third R is - <u>Recycle</u>

Recycling is the process of changing something discarded into a new product.

Dr. Binish Desai- Recycle man of India, He has patent on waste. Can you believe it?

His lab experiments on waste and useful products are made from waste, like:

- Sound Proofing Panels- Made from craft paper waste
- Cinder Blocks- Made from Metal and Textile waste
- Reusable sanitary pads- Made from Lint Waste (cloth waste)-



• Bricks made up of chewing gum are 4 times stronger than normal brick but costs half (made from used masks and discarded PPE Kits).

Conclusion

"Nothing is useless in the world; your waste is someone else's asset" – Just follow this and you'll be able to achieve these three R's.

Did you know- Indian Cricket team jerseys are made from recycled plastic!

So, we are progressing, but all of us together have to be part of this procedure and hence succeed.

Be aware and spread awareness.

I hope this article would have helped you in some aspect and would have motivated you enough, if not; let me tell you that waste management is a \$2 trillion industry globally.

It just needs patience and of course some efforts.

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Learning is the beginning of wealth. Searching and learning is where the miracle process all begins. The great breakthrough in your life comes when you realize it that you can learn anything you need to learn to accomplish any goal that you set for yourself. This means there are no limits on what you can be, have or do.

Albert Einstein

सर्व समर्थ पिता हो तुम

प्रेम प्यारी गुप्ता, विजिटिंग फैकल्टी, डी०ई०आई० इन्फॉर्मेशन सेन्टर, रूड़की

नादाँ जीव भरोसा कर, सतगुरु चरन पकड़ दृढ़ कर, वक्त बड़ा बेरहम है इस पल, बरस रहा आसमां से कहर।

पूरब पच्छिम या उत्तर, सब ओर तबाही का मंज़र, अनदेखा है शत्रु कोई, उगल रहा है ज़हर ज़हर।

काल—करम हैं घेर रहे, मानव बेबस तड़प रहे, मानवता है सिसक रही, मानव को मानव से है डर।

फूल खिले हैं गुलशन में, कलियाँ हंसती झूम रहीं, पर उपवन सुनसान पड़े हैं, अब नहीं आते यहाँ भ्रमर।

साथी सगे संबंधी अपने, आज दिखाई देते हैं, क्या जाने कोई कब चल दे, चुन ले अपनी नई डगर।

कैसा आया समय विषम, दूर सुदूर दिखा यह मंज़र, प्रेम, दया, करुणा सब भूले, सूख गए इनके निर्झर।

मेधा, विद्या, बुद्धि प्रखर, सब ही हारे, आज मगर, केवल एक विश्वास बचा है, परा भक्ति है शीर्ष शिखर।

विकट घड़ी है आज, सभी कुछ अनचाहा अनचीन्हा है, दाता अब तो राह दिखाओ, कब होगी फिर उजली सहर।

शक्ति पुंज हो, तेज पुंज तुम, सर्व समर्थ पिता हो तुम, अद्भुत छवि सिंहासन पर हो, बक्शो दया का किनका भर।

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Ten Simple Steps for Better Personality

V. Dakshina Murthy, Centre-in-Charge, DEI Information centre, Visakhapatnam, Dayal Nagar

I believe that personality is the sum total of thinking, feeling and behaviour which make a person unique. When we say that someone has a good personality, we mean that they are likable, interesting and pleasant to be with. Everyone aspires to cultivate these characteristics.

To that end, having a good personality is vital-probably even more so than good looks.

Our success and happiness depends on how we interact with others. In this brief write-up, we list ten steps to improve our personality.

- 1. <u>Be a better Listener</u>: There is nothing more appealing than having someone listen to you intently making you feel like you are the only person in the world. You should cultivate the skill of being an exceptional listener.
- 2. <u>Read more and expand your interests</u>: You should cultivate the habit of more reading and cultivate new interests. When you meet new people you can share your ideas and exchange views with them. This opens new pathways.
- 3. <u>Be a Good conversationalist</u>: No one can read about or know everything. So it is refreshing to learn from others. You should not feel shy and join in a group like toast masters that encourage to talk about what they know.

- **4.** <u>**Have your own Opinion**</u>: On what is happening around you there is nothing more tiresome than trying to talk to someone who has no opinion of his own.
- 5. <u>Meet new people</u>: Try to meet new people as it exposes you to different cultures and alternative ways of doing things. It develops your knowledge.
- **6.** <u>**Be yourself:**</u> Be your material self. Do not try to be a carbon copy of someone else for it not only falls flat but also reveals a lack of authenticity.
- 7. <u>Have a positive attitude</u>: Think positively. Try to look for the best in people and things. Smile warmly, spread good cheer and enliven others with your presence.
- 8. <u>Be fun and see the humorous side of Life</u>: Everyone enjoys the company of someone who makes them laugh or smile. So look for the humourous, quirk side in a situation. Cosmic relief is a much welcome and needed diversion at times.
- **9.** <u>**Be supportive of others:**</u> Be the support for others, when they are in need. We all love a cheer leader, someone who is encouraging and believes in us.
- **10.** <u>Have Integrity and treat people with respect</u>: Be honest and true to your word. This will bring you the admiration, respect and gratitude of others. Develop respect for others as well as for yourself.

We have the ability to shape our personality according to a format that we choose.

Having a pleasant, engaging personality is significantly related to emotional intelligence. Those possessing high level of emotional Intelligence invariably have great personality.



चरन से सदा जोड़े रखना

हँस कुमार सहाय, सेंटर इंचार्ज, डी०ई०आई० इन्फॉर्मेशन सेंटर, पटना

> जब दुख की प्रचंड आँधी आवे, कामनायें सभी ध्वस्त हो जायें, जब प्रतीत की दृढ़ता कम्पित होवे, तब हे दाता! ऐसी दया करना, चरन से सदा जोड़े रखना ।। **1**।।

जब सुख की मोहक घड़ी आवे, मन भोगों में फँस जावे, जब परमार्थ कमाना रूक जावे, तब हे दाता! ऐसी दया करना, चरन से सदा जोड़े रखना।। **2**।।

जब दुख होवे या सुख होवे, शोकाकुल होवे या हर्षित होवे, जब प्रेम—पथ पर पग डगमग होवें, तब हे दाता! ऐसी दया करना, चरन से सदा जोड़े रखना।। **3**।।

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उत्साह सफलता के सबसे शक्तिशाली इंजनों में से एक है। जब आप कोई काम करते हैं, तो उसे अपनी यथाशक्ति से करें। उसमें अपने प्राण डाल देवें। इन्हें अपने व्यक्तित्व में समाहित करें। सक्रिय रहें, ऊर्जावान बनें, उत्साही और वफादार रहें, और आप अंततोगत्वा अपने लक्ष्य को प्राप्त कर लेंगे। उत्साह के बिना कुछ भी महान हासिल नहीं होता। राल्फ वाल्डो एमरसन

<u>Role of Educational Institutions in Imparting</u> <u>Value – Based Education</u>

A Radha Kumari, Mentor, DD &T Programme, DEI Information Centre, Visakhapatnam, Dayal Nagar

In the contemporary world, the importance of imparting education with values is multi-fold. Educational institutions must focus on students imbibing moral values as well as ethics so that they become responsible future citizens of the country. Value–based education should be seen as something that is inherent in the education system.

Education Institutions must:

- Ensure holistic approach to students' overall personality development in terms of physical, mental, emotional and spiritual aspects.
- Include appropriate curriculum such as Cultural Education, General Knowledge, Agriculture Operations, Social Service, Comparative study of Religion, Skill Development Courses.
- Help students understand the importance of **"Brotherhood of Man"** at Social, National & International levels.
- Make students imbibe tolerance and respect towards different cultures and religious faiths.
- Provide a positive direction to the students to shape their future.
- Stress upon Human Values that can help every student to be Kind, Compassionate and Empathetic individuals, thus nurturing emotional intelligence.

Teachers and Staff in educational institutions must give their **"BEST"** in overall development of the students. As we are in 21^{st}



century, the Values become far more important, because of presence of advanced technologies, Internet and its harmful uses.

The key importance of value education gets highlighted when it instills a **"Sense of Meaning"** and purpose in life which supports in shaping up the future of students so that they can tackle difficult situations in life with ease.



When we tackle obstacles, we find hidden reserves of courage and resilience we did not know we had. And it is only when we are faced with failure do we realise that these resources were always there within us. We only need to find them and move on with our lives.

Dr. APJ Abdul Kalam

"Educationists should build the capacities of the spirit of inquiry, creativity, Entrepreneurial and moral Leadership among students and become their Role Model."

Dr. APJ Abdul Kalam