



New Vistas and Insights to Up skilling and Upgrading Proficiency Levels in the Pandemic Times- with Specific Reference to the Educational Eco-System

New Understanding will be required to acclimatize to the New Normal life Post COVID-19.

It is apparent that we are not retracing steps to the Normal
Now is the Time to move on to the other side of the Classroom with Blended Learning

Prof. Bhushan Manchanda



ABSTRACT

As we move forward in this New Year 2022 amidst this global pandemic with the Omicron variant , Blended Learning is easily the way forward. To put it matter-of-factly Blended Learning is an amalgamation of online learning and offline learning ie

Mixed or Combined Learning that requires hardware capability combined with the power of a Learning Management System (LMS). It offers inconceivable results, which go beyond the call and provides great insights and knowledge for the students.

Covid-19 has further accelerated the rate at which Digital Technology is being espoused. Therefore, it is imperative to borrow results that go beyond the call and make it truly an experience for the students such that they adjust to this mixed tutoring-literacy terrain, where print and digital exist side by side. This amalgamated approach will also take care of the need to incorporate audio-visual rudiments, anytime, anywhere access for scholars and teachers, leading to their continuing interest and engagement.



Blended Learning is now the New Normal.

This now looks to be the ideal way to prepare students for a world where knowledge is not a fixed set of facts you can fluently divide into independent subjects. It is a constantly adding and updating, connecting the whole that requires a high degree of independence, flexibility, and amenability to learn and ameliorate well beyond one's School and College studies.

It is important to note that with amalgamated literacy, the content of education changes as much as the mode of communication through which it is conveyed. With mobile smart phones that can quite literally let you carry your classroom with you and the vast cyber space as a substitute to the books, ***Blended Learning is now the New Normal.***

And so.....

This Epidemic Challenge we will get through, but we must face the fact that this will dramatically change the way we “work, rest and play”.

KEY WORDS

Pandemic, Covid-19, Omicron, Upskilling, Reskilling, Blended Learning, Hybrid, Virtual learning ,New Normal, Digital Technology, Teacher Competencies, Social Distancing , Work-from-home, Online and Offline learning, Learning Management System, Artificial Intelligence, Machine Learning, Ed-tech Companies, National Education Policy.



FINAL PAPER

Introduction



The COVID-19 and the latest variant Omicron will continue to seriously impact the world and whatever path we take now, we must bear in mind that COVID-19 has completely changed the way the Planet "works, rests and plays".(Borrowed from the tagline of MARS Chocolate Bar's advertising campaign).

The Education eco-system in India that is huge and massive consists of about 3 crore students pursuing different courses in over 15 lacs educational institutions-be it Schools, Colleges, Technical Institutes and so on. In person classes have been shut for most of the time due to repetitive Covid curbs. The Covid induced pandemic has posed new challenges for the teachers in terms of loss of students' learning as well as the emotional and mental well being of the students.

The Corona virus pandemic with the latest Omicron variant and the subsequent lockdown has once again prompted Schools, Colleges and Universities to go back to the technology based innovative solutions to devise and establish a pertinent learning environment for all scholars. From attending physical classes in conventional buildings housing schools and colleges we have now moved to online learning in the comfort of our homes This has ensured that somehow our classes are not disrupted.

Experts predict an entire generation of learners will be forced into online learning as countries including India once again shut down educational institutions to contain this time the spread of the new corona virus variant, Omicron.



Given the broad impact of COVID-19 on many aspects of our lives, it is but natural to be under the impression that Covid is a ruinous event. We are oppressively affected in many ways- we are not able to move out freely, dine out, meet our friends and relatives as we like or , go to work in our offices. the problem has been further compounded for the Indians by the sliding economy with the un employment rate that has risen to 7.9% in December,2021 and the urban unemployment rate going up to 9.3%. This has severely impacted the youth- with the India's joblessness rate going up from about 15.66% in 2016-17 to 28.26% in 2020-21.-Source: Centre for Monitoring Indian Economy (CMIE).

It must however be clearly understood that the digital divide has affected our children and youth. Education by way of Digital technology has manifold challenges. Class room teaching in my opinion leads to a more balance upbringing of the students rather than rote learning or the results in the examinations. Online learning may not fully be able to fully attain this objective.

All the same, 'going back' to the way we were before COVID-19 is not an option. The challenge, and I think the opportune time , is now to start the exercise of envisaging about a 'New Normal'.

We cannot re-write the chapters of history that has gone by, but we can learn from them, evolve and acclimatize. These are Changing Times in the current global pandemic...and Change is the only Constant. Maybe we will have the Normal that has a long-lasting and permanent impact where we would have to challenge and adjust ourselves as things will never be the be the same.

Ian Davis, Managing Partner at McKinsey at the time of the Global Financial crisis in the year 2008 had raised a very pertinent question. He stated that once this global crisis subsides, will the things get back to the earlier normal and also how this new normal would be different from the normal before the global crisis.

What Ian Davis said 14 years ago, during the Global Financial Crisis, could just have been written about the current COVID-19 pandemic. Globally over the past few decades we have encountered numerous threats and got the better of them. However this particular challenge seems to be difficult, long drawn out and never ending as we can see with the third Covid-19 variant, Omicron now raging in the world.



Transformation due to Digital Technology



What would have been the state of things if this pandemic had hit us 30 or 40 years back when there was no access to digital technology devices like the computers, tablets, smart phones and the Internet/Wifi....Visualize this. Do you think that you would have been able to sustain yourself?

What Digital Technology has done is more than just furnishing us with newer amenities by enhancing our capabilities. Technology has created a substitute world for us to live in. In effect, we have migrated to a new kind of civilization, with its own rules of space and time. It is not simply a way of making our lives easier, it allows us to lead new lives in parallel. It is as if on one side, our lives go on as usual even as on the other side, things have come to a shattering halt. Technology had already become an important part of our lives, but today our lives are impacted nearly entirely by technology. Every waking hour and virtually every venture, enterprise or business needs some support of a digital kind.

So far, the transition to virtual learning has progressed well despite the fact that a large number of teachers had no virtual teaching experience before the pandemic – it is a positive end result considering that how quickly the transition to online learning has happened. But if the Corona contagion spreads and becomes the "new normal", there is a strong possibility that online learning may become more than a temporary measure, forcing Schools and Colleges to turn to Ed Tech providers for help in a needed big shift to online tutoring platforms and methods.

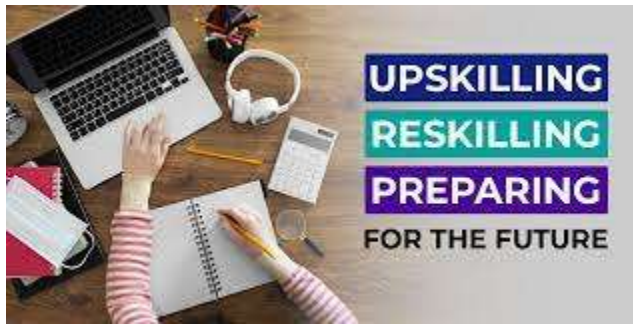
The massive move to online literacy is forcing the education system to figure out how to drive engagement in their courses. This has created a special window for the teaching staff to take



advantage of their experience in upgrading the virtual learning system in the educational institutions.

I believe that the present pandemic will force the teachers to transform the way they teach, moving from a lecture-listen model to an interactive, learn-by-doing model and I believe we are well suited to capture the wave.

New Outlook and Insights to Upskilling and Reskilling



Growing internet penetration and availability of economically priced smart phones with affordable data packages created a demand for quality education through various learning platforms. Before the pandemic, the digital advocacies were taking place largely through Massive Open Online Courses (MOOCs) and distance education.

The abrupt shift to distance literacy directly challenged the knowledge, mindsets, and capabilities of the teachers. Formerly ‘nice-to-have’ prowess in digital integration became integral to online teaching. traditional chalk and black board management and the traditional design methods were no longer applicable, and everyone was required to move up to a high skill set as the guidelines and expectations changed on a regular basis. The New Year has come and as the global pandemic remains in the form of the Omicron variant, teachers are readying for these sudden and stop gap changes to take root.

Regardless of physical class room, hybrid, or online learning models, tutoring, teaching and learning will never be the same. A few known facts of the perils of the digital divide:



1. Schools and Colleges must increase virtual readiness. (digital platforms, specialized skills, virtual beliefs and standards)
2. Health, Hygiene and Safety protocols will affect class sizes, systems, and delivery strategies.
3. Repeated closures of educational institutions have derailed teaching-learning and adversely affected the mental health and led to trauma in the children.
4. Some [students and staff](#) will need to remain at home due to social distancing norms and other reasons.
5. Students will miss out on opportunities and dialogue to appreciate the wealth of diversity the physical classroom represents. Learning away from the classroom can deprive the child of the space needed for his essential developmental and mentoring needs.

Given the present conditions, our education system faces the monumental task of preparing teachers for teaching and learning during this year We can get ideas from organizations outside of educational institutions that can provide value and knowledge in the initial phase.

Why Teachers' Upskill programmes are important ?



The need to modernize and train our Teachers was felt long before the advent of the Corona virus. In 2019, the World Economic Forum estimated that the consequences of automation, switch to virtual work, and advances in technology would lead to all employees to be upskilled



or reskilled by 2022. The specific requirements of "Work-From-Home" (WFH) and Social Distancing have added to these needs.

Our Teachers and Educators can learn from the healthcare industry that had during the current pandemic ensured that their healthcare professionals rapidly upgraded their clinical skills on an unprecedented scale to overcome the ever growing and newer challenges of the Covid 19 pandemic. To ensure an 'all-hands-on-deck' epidemic response, doctors, nurses, [medical professionals](#) across every area were imparted training on the basics of treating contagious diseases, performing common procedures like CPR while wearing PPE, and conducting virtual consultations and diagnoses.

For Teachers, there is a need for reskilling of new and existing roles. Parents must also receive training on accessing digital classes for their wards on laptops and smart phones.. Counselors are also required to ensure the emotional and mental well being of the students and provide daily small-group instruction on health and wellness. To meet extraordinary demands of virtual learning, Educators will need to think beyond the traditional teacher role to support new ideas and processes on teaching and learning.

Whatever may be, a reskilling of new ideas, thoughts, knowledge, mindsets, and value addition roles will need to occur across all positions. Competencies, proficiency and expertise previously held by Class room instructors, will require massive training and retraining in the years ahead.

Move beyond the Classroom with Blended Learning



The Covid-19 epidemic has not spared any one and affected all in every sphere-be it Administration, Work from Home jobs, Online payments through Paytm/ Google Pay, Banking to Education Sectors to Election rallies by political parties to Court hearings and many more-and all of these are being conducted online ie. in virtual mode. Although we are missing interacting,



meeting, discussing and socializing in person, this virtual connection through Zoom, Webex, Google Meet, Video Conferencing and other means has helped maintain a sense of community purpose.

In this New Year amidst this global pandemic of Omicron, Blended Learning is clearly the way forward. Though the concept has been around for some time now, COVID-19 has just been a catalyst for all Schools, Colleges and Universities to adapt to it and expand. In simple terms, Blended Learning is an amalgamation of online and offline learning with the essential requirement of compatible hardware to leverage software application or web-based technology to fulfill the specific learning process.

It offers inconceivable results, which go beyond the call and make it truly an experience for the students while solving major issues pertaining to Learning.

There is no disagreement about the rise in the uptake of e-learning and digital ways of learning and tutoring in the last many years, and Covid-19 has further accelerated the rate at which digital technology is being espoused. Therefore, it is imperative to borrow results that acclimatize well to this mixed tutoring-literacy terrain, where print and digital go hand in hand. This amalgamated approach affirms the specific need to include audio-visual rudiments, online appraisal and also allows seamless ingress and entry no matter when and in what ever place- is a boon to both the teachers and students.

Blended or Integrated learning guides and pointers effortlessly combine print and digital resources to create a harmonious learning domain not just for the student but also for the teacher and the parent. Imagine a print textbook aligned to audio-visual content for a digital board and counter plotted to an online assessment frame or dashboard that reports periodic progress to parents. These assessments provide the teacher means for positive, practical and useful evaluation to determine and establish literacy barriers for individual scholars, enabling the teacher to provide reformative and corrective topics and subjects in line with the needs of the learners. These help to put the learner at the very heart of the tutoring-learning process.

Digital learning materials, puzzles, brain teasers and posers linked to various learning and degrees of difficulty, tests and analysis, MCQ Exams, computer generated reports for parents accessible through mobile applications are some important tools that explain and provide results with respect to blended learning along with print text/work books and work sheets. From a teachers' point of view, this system provided through blended learning results leads to a rich repository of print and online materials that allows the teachers to join forces with the students to create a more connected and reciprocal and engaging learning domain. A blended approach to learning and tutoring also makes it possible to do justice to the theory of cross-practice teaching.



The biggest challenge confronting Schools, Colleges and Universities during this epidemic is in conducting impartial online examinations while making sure that there is transparency. While writing the examinations, it is important for the Educators and the Examiners to make sure that the student is the one entitled to sit for the examination, not using unfair means, not moving around, and is not in possession of any other digital materials.

Artificial intelligence provides an effective remedy to this issue, with solutions looking to evaluate the online examination terrain through retinal tracking, environment stimulus tracking, and IP tracking. Combined with the power of Machine Learning, the data generated through such digital examinations will auto-generate evaluation papers and a course of action for each pupil to help teachers concentrate on the facilitation part. There are companies such as Littlemore Innovation, Mercer Mettl and others that are through Artificial Intelligence (AI) and Machine learning (ML) ie Online Examination and Assessment proctoring software providing automated examination solutions and assessments with multiple configurable options for Educational Institutions including options to choose the mode of examination and answer input types.

We have seen a large number of Universities espousing Online Tests and Exams with marked degree of success.

Ed-tech Cos. see revenue increase amid the Covid 19 pandemic



After the outbreak of Covid-19 pandemic, with closures of institutions and wider usage of online education, the demand for Ed tech products increased multi-fold. As a result, the Ed tech sector witnessed an exponential growth in terms of patrons, influx of investment and attainments.

The increased adoption by institutions, professionals, parents, and scholars marks the growth of Educational Technology, commonly known as Ed Tech. It is the new hot tea on the table. It has



always been there, but its acceptance and growth are in the news. India's shift to digital teaching in the last two years has made great strides.

Since March 2020, the number of scholars learning online in India has increased dramatically. Schools, Universities, and Educational institutions have moved online due to the lockdown and health/safety issues about Covid-19. In the past one year, the base of several Ed tech platforms has doubled in both paid and free visitors' usage.

Covid-19 has demonstrated that, in the present world, when afflictions and the consequences of climate change are imminent, educational institutions are not able to constantly deliver in-person learning, thus highlighting the value of investing in educational technology.

According to the Indian Private Equity and Venture Capital Association (IVCA) and the PGA Labs report, India's Education Sector might witness a growth to US\$ 230 billion by 2025. As Ed tech companies are all looking for the opportunity to acquire a large share of the market, there could be a marked increase of Ed tech companies in this sector.

At present over 4,500 Ed tech start-ups are operating in India, out of which 430 have come about in the past two years alone. These companies are primarily providing their services under five major fields of education

- School & College Education,
- Skill Education,
- Advanced/Higher/Post Graduate Education,
- Preparation for Competitive Examinations such as for IIT, IIMs, and
- Learning of Non-academic subjects [e.g, Languages such as English , French, Spanish, etc.].

While Skill Education and Online Courses are the major element of the Ed tech market, Ed tech as supplement of Academic Education received huge momentum in the last few years. As per a KPMG Report, contribution with respect to education for classes 1 to 12 is expected to grow by 6.3 times by 2022 from the base of 2019.

In view of the above, global investors have shown great interest in the Indian Ed tech industry. India has surfaced among the top three countries in the world after China and the USA to get venture capital backing in the Ed tech sector. The industry has garnered private equity



investments of US\$ 4 billion in the last five years. In this regard, the acclaimed and admired Edtech companies in India are Byju's and Unacademy.

From 2015 till March 2020, Byju's had attracted 50 million customers on their platform, out of which 3.5 million are paid subscribers and the rest free. In the last few months, the number has gone up to 70 million end users of which 4.7 million are paid subscribers. Byju's and Unacademy have raised capital worth US\$ 2.32 billion and US\$ 354 million separately in the year of the Covid-19. (IVCA-PGA Lab report, 2020).

Still, except these Unicorns such as Byju's, Vedantu, Unacademy, and Toppers, other new start-ups are not able to sustain themselves in the industry either because of insufficient capital or poor blueprint and/ or project design.. With a large number of new start ups taking up space with similar offers and no differentiation or USP, customers are going in for Ed tech companies that are already established in the industry. .

Government Initiatives



One of the major factors behind the growth of Ed tech companies is the dissatisfaction with the current education system in regular classrooms. In the last few years, Governments, both Union and State Governments, have also been propogating the use of technology in the delivery of education. The Government of India is promoting online literacy in the country through initiatives like the SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), an online literacy platform run by the Ministry of Education (MoE). SWAYAM has a depository of 1,900 courses designed for Class 9 till post-graduation and is accessible to anyone, anywhere at any time.

In addition, the MoE is also running other literacy setups such as Diksha, *e-pathasala*, NIOS (National Institute of Open Schooling) that are managed by the National Council of Education Research and Training (NCERT). In these ventures, the new addition is launch of PM e-Vidya, a



digital education programme. This initiative was launched in May 2020 as part of the Covid alleviation drive under the *Atma Nirbhar Bharat Abhiyan*.

During the Covid-19 epidemic, several digital offerings are coming up and maturing quickly. The recommendations of the National Education Policy (NEP) 2020 further enforce the governments' policy preferences for virtual education. The policy envisages technology as an integral part of education planning, operations, management, administration, tutoring, literacy, assessment, educators' training, and professional development. One of its recommendations is to exploit technology in education through app-based programmes, online student groups, and delivery of lectures beyond 'chalk and talk.' as being carried out in the physical class rooms. While NEP 2020 admits the importance of bridging the digital divide and improve the digital framework, it does not clearly mention how investments would be arranged to apply the programmes on the ground.

Is India ready for Online Education Programmes with the present Digital Divide?



At present, e-Learning might seem the correct solution to fill the gap created due to the fact that classroom teaching is not taking place.. The present Covid-19 epidemic also brings out clearly the need to build sturdy online domains to provide soundness in learning. However, there are a number of difficulties in the espousal of technology in tutoring, teaching training and learning.

Poor digital framework is the key challenge in India for scaling up active use of technology in education. There is low access to technology devices such as the internet, wifi, etc. 27% of children do not have access to smart phones and laptops to attend classes in the virtual mode. (NCERT, 2020). Further 84% of the teachers reported facing challenges in delivering learning digitally with close to half of them facing issues related to the internet (Oxfam, 2020). Even if there is access, given the cost associated with Ed tech products, it is difficult for lower and lower-middle income households to bear the impact of costs related to the same.. Unfortunately,



there is no substantial budgetary allocation from the Government on plugging this digital divide and strengthening the digital base.

With respect to the Edtech start-ups, not enough proof is available about the positive impact as claimed by them. The performance of Ed tech companies is assessed primarily from market research and the number of users, rather than any endorsement of educational results. Secondly, the online education being imparted by the Ed-tech firms do not have a quality check. The contents offered by many of them are either not sound in terms of teacher education or are not context specific. Lack of affordable vernacular content ie in regional languages also limits their usage.

Though there is a lack of a conducive learning ecosystem, the drive for Ed tech seems to be beneficial for a cross section of scholars having the reach, means and resilience in choosing preferences.

We have noted a great amount of online activities taking place during the present epidemic by way of people working from home, making online payments for goods and services and so on. While we extol the virtues of online platforms, we lose sight of the rural India that is deprived and feeling isolated. Connectivity is largely for those connected and far removed from those who feel disconnected, primarily in semi-urban and rural areas. Kindly refer to the data in this regard provided by NCERT in it's report of 2020,summary details of which are given above.

The World is your Classroom



With the pandemic in full swing, it is only natural to be focused on the present. As the world has now begin to feel the positive and salutary nature of the exigency measures such as the vaccination along with booster shots against COVID-19, it is time to **look to the future**.

We need to think as to what have been our learnings and experiences once the pandemic is finally over. **Will Schools and Colleges, Educational Institutions and Training Centres ever**

be the same again? This prolonged period of forced isolation has pushed teachers and educationists globally towards a **more expansive use of Digital technology** such that the students can go on with their studies without hindrance and interruption.



Blended Learning now looks to be the ideal way to prepare students for a world where knowledge is not a fixed set of lessons you can easily divide into specific subjects, but a constantly adding and updating, connected whole that requires a high degree of independence, flexibility, and amenability to learn and improve well beyond one's students' years.

[This is where Blended Learning comes in.](#) A **combination** of in-person in physical class lessons and distance mode of learning, Blended learning is one of the important education models for the future of the technology-driven classrooms.

It may be noted that with Blended learning, the content of education changes as much as the mode of communication through which it is conveyed. We have seen that every home has now become a class room with the students learning from their teachers with the help of their digital devices-smart phones, computers and so on. Lessons through the internet have now become alternatives to the text books and work sheets. ***Blended Learning is now the New Normal.***

The Pandemic Challenge





This Challenge of the Covid-19 we will get through, but we must face the fact that this will dramatically change the way the world will “work, rest and play”.

Covid-19 has reinforced our synergy with Technology. It has shown us how we can make do fairly well while being forbidden approach to familiar areas and locations in the reality that existed before the pandemic. But it has also underscored how our sensibility and perception is wrapped up in the real world.. No matter how self-reliant Digital Technology makes us, we will always need to meet and socialize with people and move away from the present “work from home” situation.

Places ground us. Our sense of belonging needs to be connected and attached to something physical and long lasting. We apportion a little bit of ourselves across many such settings and visiting them physically helps us retrieve or connect with those people we have left behind in the pandemic.

And lastly...We need to restore the class rooms as soon as possible. Online learning can never be the substitute. While Online Learning must not be done away completely, it's benefits and uses should be garnered within the domain of the class room. This is where students blossom and connect with their Teachers and Mentors.

REFERENCES

Basu, S. D. (July, 2020). Job Status. The Economic Times.

Bersin, J. (June, 2020). Enterprise Learning. Retrieved from <https://joshbersin.com/2020/06/microsoft-gets-serious-about-learning-major-new-announcements/>

Bhattacharyya, R. and Verma, P. (June, 2020). Economic Times. Retrieved from <https://economictimes.indiatimes.com/news/company/corporate-trends/companies-train-cxos-to-take-care-of-employees-mental-health/primeshow/76686323.cms>

Express Web Desk (July, 2020).The Indian Express. Retrieved from <https://indianexpress.com/article/world/coronavirus-global-updates-july-10-6499020/>

Gambell, T. et. al. (June, 2020).McKinsey & Company. Retrieved from [McKinsey.com/business-functions/organization/our-insights](https://www.mckinsey.com/business-functions/organization/our-insights)

Go-Globe. (September, 2019). The Importance of Job Re-Skilling – Statistics and Trends. Go-Globe. Retrieved from <https://www.go-globe.com/job-reskilling/>



Lafrate, T. (June, 2020). Skills Training from their Employers. Business Wire. Retrieved from <https://www.businesswire.com/news/home/20200601005033/en/New-Study-Finds-86-Employees-Globe-Demand>

Naqvi, F. (June, 2020). Human Capital. Retrieved from <https://mail.google.com/mail/u/2/#inbox/FMfcgxwJWjGKGCzxNzHcqCrgZCzSJzdM?projector=1&messagePartId=0.1>

P. Prathibha. (June, 2020). Upskill and Apply. Times Group.

Sengupta, D. and Manikandan, A. (June, 2020). Economic Times. Retrieved from <https://economictimes.indiatimes.com/tech/internet/in-times-of-covid-firms-rush-to-get-cybersecurity-cover/primeshow>

Sternfels, B. et. al. (June, 2020). McKinsey & Company. Retrieved from [McKinsey.com/business-functions/organization/our-insights](https://www.mckinsey.com/business-functions/organization/our-insights)

Adkins, G.L. and Thornton, T.J. and Blake, K. (2009)., Journal of Business Communication

Bill Gates (2015). TED. “The Next Outbreak? We are not ready”. Retrieved from https://www.ted.com/talks/bill_gates_the_next_outbreak_we_re_not_ready/transcript?language=en

Economic and Political Weekly (June, 2020). Retrieved from <https://www.epw.in/journal>
Aviation World (June, 2020)

Guenther, D. H. (2012). Journal of Business Continuity & Emergency Planning, Vol. 5, No. 4

Institute for Public Relations Report, 2020. University of Florida, USA.

Khetarpal, S. (April, 2020). Business Today. Retrieved from <https://www.businesstoday.in/current/corporate/>

Pfeffer, J. (1994). “Competitive Advantage Through People”, California Management Review, Vol. 36, No. 2.

Robertson, I.T. and Cooper, C.L. (2010), Leadership & Organization Development Journal, Vol. 31 No. 4, pp. 324-336

The Economist (March, 2020). Retrieved from <https://view.e.economist.com>
