

Manuscript 1040

Change Management in Education

Betsurmath CG

Prashanth Sadashiva Murthy

Follow this and additional works at: https://rescon.jssuni.edu.in/ijhas

REVIEW

Change Management in Education

Betsurmath CG a,*, Prashanth S. Murthy b

Abstract

Social challenges are constantly evolving and organizations need to adapt timely improvisations to stabilize the growth amidst these presenting challenges. The word "social challenges" itself is so varied in its representation, that it circumscribes various "planned" and "forced" challenges and threats that innately has the potential to destabilize the more so stable flow of processes. Educational institutions are expected to steer a variety of domains for a cumulative stable and progressive outcome. When the stakes at hand are so diverse and the challenges so intense, there is no landmark recipe that can be a single solution to all challenging situations for any educational institution. Hence, it is imperative to have a collective observational array of various institution's responsiveness and the resultant outcomes handy to plan the best permutation of the change management for the challenge at hand. This article focusses on the review of literature to collate the various change management outcomes undertaken by educational organizations to meet the potentially disruptive challenges.

Keywords: Organizations, Permutation

1. Introduction

ong term sustainability is the paramount objective in any organization. If the organization is an educational institution, the stakeholders are myriad and the repercussions are severely punishing and even a single down slide posses a long recovery trajectory [1]. The leadership agility is a prime determinant in overcoming the organizational inertia to any change management situation [2]. Organizational change is the management's attempt to have organization members to think, behave and perform differently [3]. This literature is an attempt at systematization of the change management models with various case studies and reviews of responses and approaches adopted by various educational organizations before, during and after the pandemic.

The Review of literature is done with referencing from government published documents and reference guidelines, publications from international and national organizations like World Health Organization (WHO), United Nations International Children's Emergency Fund. (UNICEF), United Nations Educational, Scientific and Cultural Organization (UNESCO), Peer reviewed journals, journals from international and national literature critics and web literature reviews.

"Everybody has the right to education ... Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, racial or religious groups, and shall further the activities for the maintenance of peace" as quoted in the Universal Declaration of Human Rights 1948 by the United Nations) [4].

"Education is a basic human right, and it is central to unlocking human capabilities. It also has tremendous instrumental value. Education raises human capital, productivity, incomes, employability, and economic growth. But its benefits go far

Received 28 February 2023; revised 14 March 2023; accepted 14 March 2023. Available online 14 June 2023

E-mail addresses: dlittpublications@gmail.com (B. CG), dr.prashanths@jssuni.edu.in (P.S. Murthy).

^a JSS Mahavidyapeetha, Mysuru, Karnataka, 570015, India

^b Department of Pediatric and Preventive Dentistry, JSS Dental College, JSS Academy of Higher Education & Research, Mysuru, Karnataka, 570015, India

Corresponding author.

beyond these monetary gains: education also makes people healthier and gives them more control over their lives. And it generates trust, boosts social capital, and creates institutions that promote inclusion and shared prosperity" [5].

Education has always been vital to human growth and welfare. Its effect could not have been more valuable than at the present time of rapid economic and social change. One of the best ways to equip children and youth for a better future is to make their learning the epicenter of all efforts and to promote value based education. According to United Nations Educational, Scientific and Cultural Organization (UNESCO) present-day definition of education goes like this, "Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs, and habits." The United Nations Sustainable Development Goals (SDG) has included Quality Education for all by 2030 as one of the priority goals and has designated it as SDG 4. Sustainable Development Goal 4 is about quality education and is among the 17 Sustainable Development Goals established by the United Nations in September 2015. The full title of SDG 4 is "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". Education is at the root of this SDG, which aims to ensure education for all, starting from basic education [6]. Specific objectives include providing more opportunities for technical and vocational training to youth and adults so they can get better jobs; ending inequality in educational opportunities between men and women; providing the right education for children with disabilities, indigenous people and victims of conflict; improving school facilities to provide a safe and positive environment for everyone; increasing the number of trained and qualified teachers and promoting education for sustainable development. This is the level of importance that is presently given globally for education [7].

In Indian Constitution, Education has been given great importance and is declared as one of the six fundamental rights. The six fundamental rights that the Indian Constitution guarantees to Indian citizens are: (i) right to equality, (ii) right to freedom, (iii) right against exploitation, (iv) right to freedom of religion, (v) cultural and educational rights, and (vi) right to constitutional remedies. The Right to Education Act 2009, also known as the RTE Act 2009, was enacted by the Parliament of India on August 4, 2009. The act mentions about the importance of free and compulsory education for children aged between 6 and 14 years in India under Article 21 (A) of the Constitution of India. This act came into effect

on April 1, 2010 and made India one of the 135 countries to have made education a fundamental right for every child [8].

Unexpectedly, COVID-19 shocked the world. One of the most impacted and interrupted domains was education. Despite all the efforts made during COVID-19 to teach and learn using technology, there are still numerous worries, warnings, and enormous, disconnected flaws in educational technology. Concerns about the legitimacy of various technological tools and their educational applications, as well as concerns about their real-world effects, were raised. Blended learning is now common, and educational institutions are utilizing it in particular to link to remote intellectual resources, especially in the wake of the COVID-19 pandemic [9].

Broadly describing, the education system in acute need of subsequent change management that is required for streamlining its sustenance. Majorly it was becoming increasingly evident that the learning technologies were evolving at a stupendously faster pace than ever had been witnessed [10]. Technology augmentation was extending the human learning and intelligence and potentially transforming it by enhancing and simplifying the means of human connectivity beyond borders.

Change management has always seen constant evolution in the field of education. Sartori et al. in the year 2018 presented a reflective paper where in the authors have discussed about the change process and change management in context of activities, functions, and tools [11]. Amidst the challenges in the education revolution, the decentralization of education was given attention as deliberated by Gaynor in her book published in 1998 by the World Bank in its attempt to restructure education systems. The document introduces the reforms and the strategies as part of education in conjunction with public sectoral reforms as a major societal upgrade that many countries were planning. Decentralizing the financing and administration of education services to regional, local, or school levels were the goals of this series, and it was targeting to assist policymakers to refine strategies and to choose between possible options for system restructuring [12].

The pragmatic change in the education system was predicted as early as 2000 by Dunn. The literature "The Virtualizing of Education" states that by 2025, traditional universities may be considered as a relic thing of the past. Future Educational systems may see a replaced consortia of course providers, spread across the world, with delivery systems that simply bypass the classrooms [13].

Though there have been significant changes that are happening in the field of education, it has received very less analytics and research deliberations. One of the probable reasons for this would be the slow transformation that these reforms would being as outcome. Though slow in progression, these transformations are highly significant and highly impactful at a global level. The impact of education, experience, and skill on the capital outcomes of business is discussed in the publication by Myers et al., in 2004, where the authors mention the human capabilities that the education builds as "Human Capital" [14].

Cummings in his research on "The Institutions of Education" in year 1999 brings forth the important questions that the contemporary institutions of education face while they are compared with each other. The expression of the deficiency in the true analytics in education system is highlighted in the study as the authors identify that the comparison focuses on the context of education rather that the education systems per se [15].

1.1. Impact of COVID 19 and Changes that have occurred in Education

The COVID-19 pandemic has forced the world's economy into hitherto unseen global recession. The pandemic of the century will have far reaching effects on day-to-day livelihood of people, systems in the education sector, economies, and structure of healthcare sectors. However, the impact of COVID-19 in the education sectors, has been severely unpredictable and almost totally unprecedented, especially in the developing and the underdeveloped part of the world. The COVID-19 pandemic is having a global impact on learners and teachers around the world, at all levels of education, from pre-primary to secondary schools, technical and vocational education and training institutions, universities, adult learning, and skills development. There was a huge loss in the learning process. It is expected to imply for a much longer period than expected [16].

The disruptions caused by the pandemic caused millions of children worldwide to miss out on early childhood education which is the most critical and influential aspect during the formative years with regard to the development of the aptitude. They missed an enriching environment which provided interactive learning opportunities and social interaction. In some cases, children were even deprived of adequate nutrition through daily snacks & food that is provided in many educational institutions. All these are expected to compromise their long-

term healthy development, especially those children from poor and disadvantaged families. Technical and vocational education are the most hit with respect to the quality of the training systems. The vulnerabilities in this segment included low levels of digitalization and total non-exposure to the practical aspects that formed the major structure of the vocational and technical training. It was challenging to implement internships, training, and experiential work-based learning exposures for the active learners due to the general lockdowns [17]. The learners were as a result not exposed to crucial components of developing practical and marketable skills. The desired outcome of this type of education is theoretical knowledge without applied sense or practical skill. Online platforms and taped lectures were typically used in higher education for online learning. Some colleges delayed learning and teaching until they had the necessary technological know-how, which seemed to create a gap that persisted due to a lack of infrastructure for information and communication technology. Longer-term disparities are expected to result from the differential learning modalities during the lockdowns. Whereas this was the situation in certain parts of the world, there were the developing and developed urban and semi-urban sectors where E-learning or online learning became the new normal during the pandemic. The technologically literate sectors of the society adapted well and the impact of online connectivity with the learners through the learning systems varied in the magnitude of its effect [18].

While some educational institutions arduously implemented e-learning modalities and directed their efforts in providing adequate educational and intellectual resources to the learners, many found it difficult to cope with the new systems in the developing and the underdeveloped societies. The pace at which the student community adapted to the new learning process also showed varied responses. Not all students have access to technology and gadgets for online classes. The level of concentration towards online teaching modalities were also much different and not the same for all students. Apparently, self-motivated students managed to succeed to a larger extent [19].

While it was observed that the students' social skills were downtrodden, the positive development was enhanced resiliency and cooperation between the teachers and students. Although the COVID-19 epidemic has posed difficulties for the teaching and learning process, it has also given educational institutions the chance to adopt cutting-edge changes in the education system that make better, smarter, and greater use of technology [20].

The move towards technology enabled distance education models has been an opportunity to expand flexible learning modalities. It has been a foundation for setting a transition towards a sustainable shift to digitally augmented learning in the future. The fact that the requirements and standards differ for each educational level and discipline is a major source of concern. In contrast to the higher education sector, which focuses on technical and functional skills with practical knowledge applications, elementary education aims to teach students behavioural education and places a strong emphasis on group activities to imbibe good social interactive skills and emotional quotient development. Despite the increased acceptance of online learning, some pressing challenges have also become top priorities. Issues with cybersecurity, poor internet connectivity, restricted access to necessities like energy, a lack of technical infrastructure, and a lack of digital literacy have all posed practical challenges for the widespread adoption of the online education system. Several student neighborhoods lack digital amenities. Remote places do not have access to modern technology. This creates a digital divide in the education sector which is not appreciable as it leads to noncontributing structural developments [21]. Certain efforts from the governments of some countries to minimize the divide like utilizing the national television and radio stations for educational purposes have seen some success, however, it has not led to comprehensive outreach.

The vast digital gap and the primary difficulties encountered by students in online education are listed below.

- 1. Access to the Internet
- 2. There are too many professors using various online learning approaches.
- 3. Scant broadband information
- 4. Sluggish personal computers and gadgets
- 5. Inability to concentrate owing to environmental disturbances
- 6. Loss of motivation as a result of not being able to interact with friends and professors in person
- 7. Trouble understanding the subjects' content
- 8. Inability to use online learning effectively

In the Indian context the major challenges that are faced at the level of national execution are.

1. We relied on a typical classroom-based education system in India, therefore we weren't prepared. The fast transition to online education was unprepared for by both teachers and

- students. Prior to the pandemic, both the government and business sectors seldom made any efforts or investments in the infrastructure development of online education. Despite a small number of institutions might have the resources for some level of teacher and student digital literacy, that is generally not the situation across India.
- 2. Technological issues: Online instruction necessitates sophisticated hardware and software, such as computers and high-speed internet access, which are not accessible to all socioeconomic groups [22]. Moreover, user interphase calls for specialised knowledge and abilities. Both our teachers and students have had little prior exposure to online learning environments. Although being expensive and time-consuming, structured teacher training programmes are necessary in India.
- 3. Economic issues: Many students cannot afford the technology needed for online learning. It became clear that students were unequal. Also, the economic recession had an effect on all parties. Due to job loss or wage cuts, many parents are having difficulty during the COVID-19 pandemic. Due to the unequal distribution of wealth among cultures, it is become harder to support families. There are concerns about accessibility and affordability. The situation worsened as a result of the abrupt increase in the cost of necessities. With the exception of a small number of internet service providers and those that offer necessities, none were successful. Families were impacted by the COVID-19 societal stigma, and uncertainty indirectly contributed. Due to unpaid fees, many academic institutions experienced financial difficulties, which administrators tried to address by reducing instructor salaries. This solution really had the opposite effect on the entire educational system. A lot of specialist education fields, like hotel management, travel, and tourism, etc., are just career-focused. They are having a terrible influence [23].
- 4. Physical activity and health problems: Since neither teachers or students are attending the institutions, there is no physical activity, which is crucial for the pupils' growth and development. Moreover, extended periods of time in front of computer screens can cause obesity, eye issues, headaches, neck pain, and backaches.
- 5. Social activity issues: Online learning is conducted in solitude. Stress, despair, and weariness are caused by a lack of social engagement. Several pupils from the underprivileged and

economically challenged sections of society attended the "mid-day meal" in India. Further social unrest was brought on by stress, worry, uncertainty, and a lack of government initiatives. Nonetheless, it means that a significant portion of the year will be lost, even though some unofficial reports claim that schools may open as early as October 2020. While petitions backed by politicians opposing schools' interests continue to grow, there is no news regarding financial support for schools. There still need to be many exams. Leaving batches struggle to obtain employment because there are currently few openings [24]. In the near future the job market would drastically change, and new types of knowledge and skill will be required to sustain.

- 6. Effective learning issues: It's the biggest obstacle to online learning. The cognitive, affirmative, and psychomotor domains are essential for efficient teaching and learning. Even if online instruction aims to produce the best results, it is incredibly challenging without in-person contacts. None of the obstacles to learning-the intuitive-emotional, the critical-moral, and the critical-logical obstacles—could be effectively addressed. Isolation renders kids passive students who are powerless to manage outside distractions. They become less concentrated when they are too adaptable. Involvement and cooperation are challenging. Creating study materials is a time- and money-consuming process. Future uncertainty that causes anxiety. Evaluation is challenging because there isn't direct communication (like in a classroom).
- 7. Skill based subjects can't be taught: The subjects demand hands-on, practical training. Nursing, engineering, and medicine, for example, cannot be taught online.

India's complex social structure necessitates a robust public education system that incorporates a global perspective. The country has not been able to develop a system of education free from discrimination due to its size, large population, and caste structure. In April 2020, when school closures were at their worst, about 91% of kids were not enrolled in classes. It has also been highlighted that many developing nations have chosen radio and television classes, and that for primary and secondary education, 55% of low-income, 73% of lower-middle-income, and 93% of upper-middle-income nations have adopted online learning platforms [8].

There are significant difficulties while performing experiments in a lab. This issue primarily affects subjects from the scientific stream. For

practical examinations, alternate options like virtual labs and simulations are used. In order to effectively explain theory and physics, teachers are finding themselves learning how to create animations and short films/videos. They give the students the opportunity to conduct experiments, gather data, and respond to inquiries to gauge their comprehension.

Overall, e-teaching techniques used today to deliver education outside of school/college complexes are only a temporary solution, and the teaching and student communities deserve all the credit for coming up with a workable substitute during a time of crisis. It's important to realise that education in a school setting encompasses more than just classroom instruction; it also refers to the setting in which a child develops. Let's hope that the Covid-19 situation may be resolved permanently so that the kids can return to the colleges and schools, which are really the temples for their complete human growth [25].

COVID pandemic brought "forced" changes into the education system. In the Indian context, the National Education Policy is an attempt to bring the planned changes and systematic upgrades. The National Education Policy was approved by the Government of India on July 29, 2020, and the Ministry of Human Resource Development was also renamed as Ministry of Education. This new education policy will replace the 34-year-old National Education Policy 1986. The prime objectives of the New Education Policy is to bring in multidisciplinary approach in education with emphasis on skill development. The rigid separation between arts and science curriculum is circumvented. Accessibility to education is enhanced by single common entrance and comprehensive growth mapping is included through academic bank of credit, which also gives flexibility, yet make it accountable with multiple entry and exit system. Thrust is being laid on the digital learning platforms in education systems. India will be promoted as a foreign study destination through provision of premium education at affordable costs. The expenditure on education will be changed to 6% of the total GDP, as opposed to earlier, which was 4% of the GDP.

With the discussion closing on the NEP 2020, and the general disrupt that the COVID -19 has created in the smooth adoption of the new education policy, it seems to be prudent to conclude about any outcomes. The reason of this would be that the NEP 2020 is in its early days of adoption. The COVID-19 pandemic might have slowed down the adoption, but the planned target timeline is 2030. With over 8

eight years left for its implementation, the milestone seems achievable.

1.2. The change management

Change management is the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers. The success rate and resultant efficiency of change management was attributed to presence of valid framework, motivation to initiate the suggested change, short term goals and lack of patience and perseverance to achieve long term goals, promotion of real leaderships with strong endurance, planning to answer the future questions with legitimate tangible answers, ensuring competency-based authority rather than position-based authority and robust strategy [10].

Todnem R in the theoretical work on critical review of organizational change has enumerated that, changes are inevitable for the progress of the organizations but are very vital in determining the direction in which the change takes the organization in the course of time. The argument's main thrust is that every company must effectively manage change in order to endure and thrive in the fiercely competitive and dynamic market. Yet, the change management theories and techniques that are available to academics and professionals are usually contradictory, mostly empty of empirical data, and based on unproven assumptions about the characteristics of contemporary organizational change management. According to the author, the most important first step in the change management process is creating a new framework for managing essential procedures [13].

The authors from Aston Business School, Birmingham, UK, have proposed in their organizapsychology research work that exploitation of change through innovation is achieved in large part through the work of teams embedded in organizations. They do this by lucidly describing the successful management of change through developing innovative teams. Understanding how creative teams can be formed is necessary for managing and putting change into practice. The demands for change are complex and multifaceted, so it is no longer possible to view senior management as having sole responsibility for initiating and implementing timely responses. Instead, every manager must play a role in this in order to achieve changes among all members of the organization who contribute to the team. An effective method for handling organizational change is teamwork [26].

A leader's capacity for navigating change, uncertainty, and disruption is crucial, and the development of the worldwide pandemic in 2020 proved this point beyond a shadow of a doubt. According to the Harvard Business Review, it is only natural for leaders to frequently report feeling trapped, underprepared, or overwhelmed as they deal with the increasing demands of their jobs at a time when the complexity of our world has outpaced the complexity of our minds. As Satya Nadella, CEO of Microsoft, put it, leaders must transform from a "know it all" to a "learn it all" approach. Rather than trying to suppress these emotions, leaders must learn to accept and embrace the discomfort as an expected and natural part of the learning process. Certain suggestions enlisted includes letting go of perfectionism as in a complex environment, the context is continually shifting; thus, aiming for perfection is futile. It is easy to oversimplify complex problems to make them simultaneously look less intimidating, so leaders must learn to strike a balance between their need for action and a disciplined approach to comprehending both the fundamental issue and their own prejudices. While it may seem like you have greater control over the issue at hand if you break a problem down into its component elements, doing so can also limit your viewpoint and obscure crucial interdependencies, giving you a false sense of security. The suggestions for teamwork come naturally, but the most important thing is to develop the habit of intentionally reaching out to networks and beyond for viewpoints and information. Each of us has an inherent limit to what we can understand and how objective we can be in any particular circumstance. Yet, by cultivating and establishing connections with a network of peers and colleagues, each of whom has a unique set of experiences and perspectives, there may be potential to exponentially increase knowledge and perspective [27].

The Harvard business review of January 2021 brings a new perspective about the major transitions that are happening in the field of management.

- Employers shift from managing the employee experience to managing their life experience.
- New regulations limiting employee monitoring
- Flexibility of working shifts form location to time
- Mental health support to the employee is the new normal
- Employers looking to rent the talents to fill the skill gaps
- Competition to rent the talent rather than employ them

This review bring out the pragmatic change that is happening across the field of management including that of education that will set new norms for the leadership to accommodate as well as manage [24].

To determine the approaches used, as well as the nature and efficacy of their use in the context of healthcare, a systematic review was conducted. The cause of accelerated change in the adoption of initiatives and the realisation of their outcomes to meet external targets was identified as the increasing importance placed on healthcare quality across the six domains of efficiency, safety, patient-centeredness, effectiveness, timeliness, and accessibility. Although there are many different change management approaches, it is still unclear how to apply them in challenging healthcare environments. 38 studies reporting the application of 12 change management strategies in healthcare settings across 10 countries were considered. According to the study's findings, complicated healthcare contexts frequently adopted change management approaches as their guiding principle. The ability of well-established change management methodologies to provide guiding principles for change that are well-suited to enabling methodologies to be applied in the context of complex and distinctive healthcare contexts, as well as to be used in synergy with implementation and improvement methodologies, was valued. Co-design is a technique for meaningfully including service users, such as personnel, patients, and carers, in a process or service change. The article's conclusion is that teamwork and widespread participation are essential for successful change management in the health care sector [19].

To find the problems with telemedicine deployment, a review with three bibliographical databases (CINAHL, PubMed, and ISI Web of Science) and four specialised telehealth journals was done. Successful telemedicine services necessitate a considerable organisational and practise change even while telemedicine increases access to health care services by enabling remote care diagnosis and treatment of patients at a distance. Despite the fact that the "people-side" of implementation is important, research on best practises in change management for telemedicine implementations is still dispersed and provides little comprehensive insight into the precise procedures involved in the change process. 16 change management techniques related to the strategic or operational aspects of telemedicine implementations were found in the 48 papers, according to the study. It was found that telemedicine implementation studies did not frequently

report the important change management methods that are acknowledged in the larger change management literature as crucial for successful and sustained transformation. According to this study, general change management techniques may also play a significant role in the administration of the health care industry [27].

Leading change effectively is critical to advancing medical education. Residency didactics often require change to meet stakeholder's needs. The authors of this study have adopted the Kotter's change management model (KCMM), which is an 8step method for implementing change that can be applied to educational initiatives. This innovation improved an emergency medicine residency didactics curriculum through application of KCMM. The percentage of residents who agreed or strongly agreed that lectures provide a valuable learning experience increased with the adoption of this model. The percentage of residents who agreed or strongly agreed that they felt well-prepared for the written boards were higher with this model implementation in academics [15].

The Kotter's change management model included.

- Establish a Sense of Urgency
- Create a Powerful Guiding Coalition
- Create a Strategic Vision
- Communicate the Vision
- Empower Others to Act on the Vision
- Plan for and Create Short Term Wins
- Consolidate Improvements and Produce Still More Change
- Institutionalize New Approaches

There is absolute fool proof exact method or prescribed formula or recipe for managing change; no single troubleshooting method which will guarantee success and this is particularly true in a diverse organization like an Higher Education Institutions.[28] The analysis directs thoughts to the fact that there are three dynamics of sustained change: the first being reenforcing interaction among transforming elements, second, the perpetual momentum resulting from steady accumulation of incremental changes and finally the ambitious volition embedded in the organization as a collective commitment along with the institutional will [28]. The organizations benefit largely to their intrinsic capabilities to be able to think seriously about management and governance questions because good management and effective governance assist academic performance and strengthen universities' ability to withstand the environmental and social turbulences [29].

Any change that is planned well and introduced by managers might also be perceived by its employees as an instability, where in, they may find themselves to be working within a constantly shifting environment. This does not mean that it is not possible to introduce change management. What is rather indicates is that it is important to be aware of what other changes are also occurring in a resultant response at the stakeholder end and acknowledge the risk that any individual set of changes may bring in and make sure it would not overwhelm the already existing turmoil [30].

There have been innovative method applications like adoption of lean six sigma concept in the knowledge domain by various organizations that have reported satisfactory results but however, the universality of the method is still questionable [31].

Some of the studies under examination claimed that academic theories and change management methods were frequently incoherent, deficient in empirical data, and underpinned by untested claims about the nature of modern organizational change management [32].

Of the recommendations, the one that suggests that "good process" is more important than the static notion of "good practice" when seeking to create and lead change in higher education seems to be one of the practical models that resonates with the changing times and growing challenges [33].

In depth study of the good process leads to the theory of complex adaptive systems that has the components from three paradigms of management thoughts namely, the systems theory, the population ecology and the information processing. This theory dwell deeply into the organizational psychology and derives its principles from the complex human to human interactions and the outcomes that guide these interactions collectively [34]. The role of the opportunities that area available to the organization directs the response has been suggested by a study that followed an organizational behavior for a longitudinal duration of 20 years. The lack of a universal pathway towards change management is also one of the observations presented [35].

Two representative terms "revolution" and "evolution" has been used for incremental and discontinuous change, and sudden and dramatic one respectively by the scientific literature that reviews on the context of practical considerations of the organizational psychology. Though the lack of universality is not clearly contracted, the author suggests that the mode in which the change is planned, weather by evolution or by revolution, determines the predictability, with the success rate more bent

heavily towards the evolutionary approach than on the evolutionary approach. However, the type of the challenge determines the mode of management change that needs to be adopted; wherein a sudden unplanned larger impact change requirement would need a revolutionary approach; a gradual expected management of change is better off with a evolutionary model [36].

This review concludes in line with the observations of yet another reference which states that "without being aware of various different change management approaches, managers won't know what the best option for their situation just like preparing for battle, a general wants not a single weapon but an arsenal at their disposal" [37]. It is always be wise to be equipped with many possible solutions and customize it to the situation as timely apt.

2. Conclusion

Change is the rule of nature. The same is true in the field of education. With every change, comes the greater challenge of continued sustenance. The review of successful change management suggests that there is no landmark recipe that can be a single solution to all challenging situations for any educational institution. COVID pandemic gave insight to many a technology solution that were available but never were accepted and nor were applied to the fullest of the potential into the education sector. Hence, it is imperative to have a collective observational array of various institution's responsiveness and the resultant outcomes handy to plan the best permutation of the change management for the challenge at hand. It is also inferable that every institution needs to customize the change management solution coupled with innovation which can suit its integral structure in order to face the challenge and ensure continue growth and sustainability.

Conflict of interest

There is no conflict of interest.

References

- [1] Universal declaration of human rights. https://www.un.org/en/about-us/universal-declaration-of-human-rights.
- [2] Learning to realize education's promise. World Bank group flagship report. World Bank Publications. USA. 2018:38.
- [3] Bonk CJ, David AW. Reflections on the waves of emerging learning technologies. Educ Technol Res Dev 2020;68: 1595–612
- [4] Sartori R, et al. How do you manage change in organizations? Training, Development, Innovation and their Relationships. Front Psychol Mar 2018;9.

- [5] Decentralization of Education. Cathy gaynor. Washington, D.C.: The World Bank; 1998, ISBN 9780821338100.
- [6] The virtualizing of education, Samuel L Dunn, The futurist; Mar/Apr 2000; vol. 34, 2; ABI/INFORM Global, pg. 34.
- [7] Myers, et al. Maximizing the human capital equation in logistics: education, Experience and Skills. J Bus Logist 2004; 25(1).
- [8] Harrison, et al. Where do models for change management, improvement and implementation meet? A Systematic Review of the applications of Change management models in health care. J Healthc Leader 2021;13:85–108.
- [9] Anjorin A. The coronavirus disease 2019 (COVID-19) pandemic: a review and an update on cases in Africa. Asian Pac J Tropical Med 2020;13(5):199–203.
- [10] Policy brief: education during COVID-19 and beyond. United Nations. https://www.un.org/development/desa/ dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_ Covid-19_and_educationaugust_2020.pdf.
- [11] Amir LR, Tanti I, Maharani DA, et al. Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. BMC Med Educ 2020;20:392.
- [12] Strengthening online learning when schools are closed: the role of families and teachers in supporting students during the COVID-19 crisis. OECD policy responses to coronavirus (COVID-19). https://www.oecd.org/coronavirus/policy-responses/strengthening-online-learning-when-schools-are-closed-the-role-of-families-and-teachers-in-supporting-students-during-the-covid-19-crisis-c4ecba6c/.
- [13] Escueta, M. et al., Education technology: an evidence-based review. NBER Working Paper, No. 23744.
- [14] Reimagining the role of technology in education: 2017 national education technology plan update. U.S. Department Of Education; January 2017. http://tech.ed.gov.
- [15] Hidayu S, Ismail FA, Shah I. Technological pedagogical content knowledge (TPACK) in teaching 21st century skills in the 21st century classroom. Asian Journal of University Education 2019;15(3):24–33.
- [16] Hafisah Y, Hassan W, Hartini W, Daud SR. Digital divide among elderly workers a comparative study between public and private sectors in melakay. Asian Journal of University Education 2016;12(1):53–81.
- [17] Barot JS, et al. Students' online learning challenges during the pandemic and how they cope with them: the case of the Philippines. Educ Inf Technol 2021;26:7321–38.
- [18] When schools shut: gendered impacts of COVID-19 school closures. UNESCO[61960]. https://unesdoc.unesco.org/ark:/ 48223/pf0000379270.
- [19] COVID-19. Are children able to continue learning during school closures? A global analysis of the potential reach of

- remote learning policies. August 2020. https://data.unicef.org/resources/remote-learning-reachability-factsheet/.
- [20] Gayef Albena. The management of change in education. Educational Alternatives 2014;12.
- [21] Todnem R. Organizational change management: a critical review. J Change Manag 2005;5:369–80.
- [22] West MA, et al. Twelve steps to heaven: successfully managing change through developing innovative teams. Eur J Work Organ Psychol 2004;13(2):269–99.
- [23] Rebecca Ž, Darin R. Harvard business review. 6 strategies for leading through uncertainty. 2021.
- [24] Kropp B. Harvard Business Review. 9 trends that will shape work in 2021 and beyond. 2021.
- [25] Kho, et al. A systematic scoping review of change management practices used for telemedicine service implementations. BMC Health Serv Res 2020;20:815.
- [26] Haas MRC, et al. Didactics revolution: applying Kotter's 8step change management model to residency didactics. West J Emerg Med 2020;21(1):65-70.
- [27] Pundyke OS. Change management in higher education: an introductory literature review, Perspectives. Policy and Practice in Higher Education 2020;24(4):115–20.
- [28] Clark BR. Sustaining change in universities: continuities in case studies and concepts. Tert Educ Manag 2003;9(2): 99–116.
- [29] Shattock M. Forget copycat management. International Higher Education 2022;25(27):2.
- [30] Barnard M, Stoll N. Organisational change management: a rapid iterature review [online]. Bristol, United Kingdom: Centre for Understanding Behaviour Change; 2010.
- [31] Svensson C, Antony J, Ba-Essa M, Bakhsh M, Albliwi S. A Lean Six Sigma program in higher education. Int J Qual Reliab Manag 2015;32(9):951–69.
- [32] Nadeau S. Lean, six sigma and lean six sigma in higher education: a review of experiences around the world. Am J Ind Bus Manag 2017;7:591–603.
- [33] Todnem R. Organisational change management: a critical review. J Change Manag 2005;5(4).
- [34] Middlehurst R. Quality enhancement in principle and practice: a case study in leading change. Tert Educ Manag 2010;5(1):25–48.
- [35] Dooley KJ. A complex adaptive systems model of organization change. Nonlinear Dynam Psychol Life Sci 1997;1: 69–97.
- [36] Rebore G, Turri M. Change management in universities: more a question of balance than a pathway. Tert Educ Manag 2010;16(4):285–302.
- [37] Clarke H. Context, communication and commiseration. Perspectives: Policy and Practice in Higher Education 2012; 17(1):30-6.