The New Normal Learning Framework

(Position Paper)

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The rise of the COVID-19 pandemic in March of 2020 posed the most dangerous threats to education in recent history. It has undoubtedly left a lasting impression on our future generations by changing the way we live and learn. As the pandemic swept across the world devastating our economy, health, finances, travel, and employment. People from all walks of life in our society still feel the devastating effects of COVID-19. It has heightened uncertainty in all aspects of our modern society. Education as a human activity system, a vital part of our societal system, and was not immune to the effects of the pandemic. Subsequently, this global health crisis has given rise to a new normal affecting all aspects of our lives. To distinguish from previously used New Normal term relation to World War I, financial crisis of 2007–2008, we can refer to the this new normal as the Post-Pandemic New Normal. In the new normal, we, in the field of education and training, are unable to cater to the needs of learners unless we understand the systemic changes brought about by the pandemic in all sectors in our society, all of which, have implications in education and training. In new normal, we will need to change our mindset to truly understand the emerging paradigm shift. Accordingly, we will also need to devise new strategies to confront uncertainty and continue to engage in innovative and meaningful learning and teaching in the new normal.

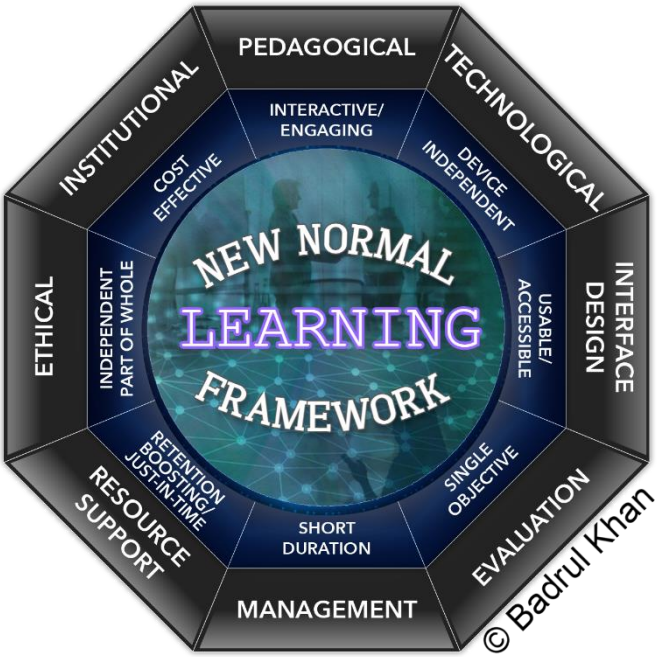
Before we can answer the question about what a 'new normal' of life might look like post-pandemic, let's talk about life during pandemic. Imagine that you have been living in space since February 2020 and decided to come back to earth in March 2021. What would you see on earth that you did not see before? You would probably be surprised to see people wearing masks, maintaining social distancing, working remotely, getting vaccinated, and doing virtually almost all of their shopping online. And, you would probably say to yourself, "What happened"? This is how COVID-19 changed the world! And, even when the pandemic is behind us, will we go back to living like before? I don't think so!

For better or for worse, the world has already changed. We are now living in the post-pandemic New Normal (NN). Every system in our society, including governments, industries, healthcare, financial institutions, and educational institutions, can no longer provide their services the way they used to before the pandemic. Their services have changed, becoming more flexible and more targeted toward people's needs. With the affordances of technology, all of our social systems are increasingly adapting their services for life in the new normal. Ironically, the

pandemic helped to improve our understanding of the technologies in the digital transformation and accelerated their adoption in our daily activities. Subsequently, technology will play a critical role in the post-pandemic world. Increasingly, digital transformation becomes an important component of the new norm in the post-pandemic world. In the NN, we will need to adapt to the new changes. However, some people may not fully adjust to the changes, which in turn, could hurt them and make them lag behind.

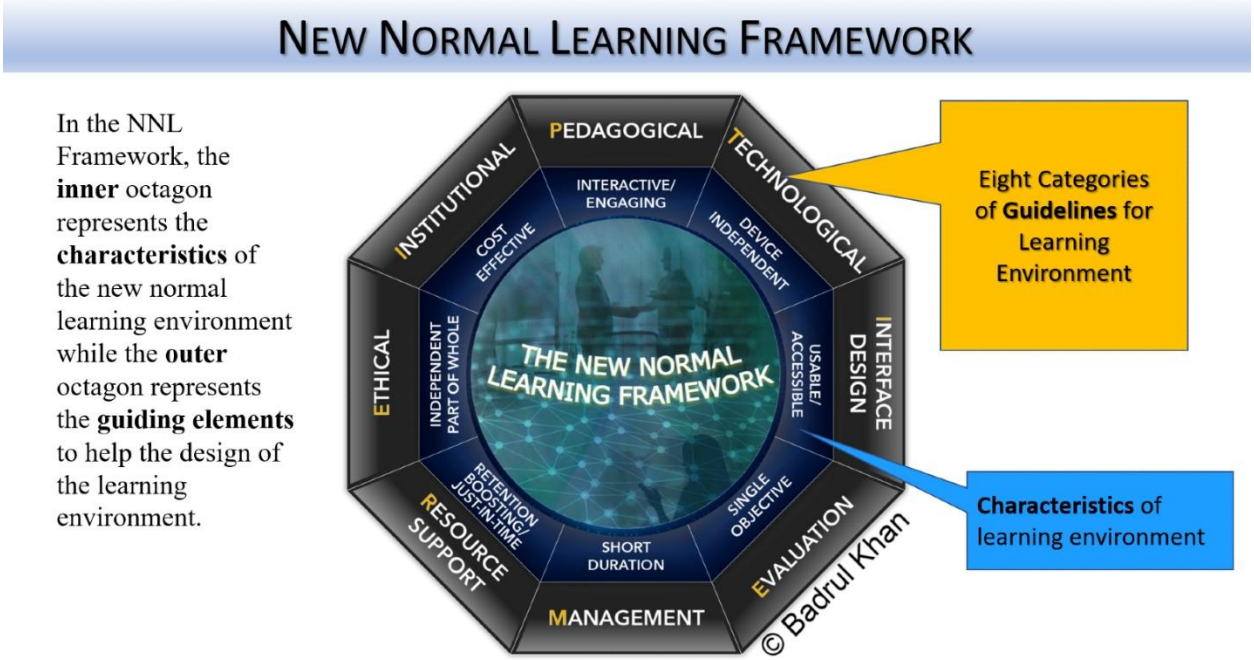
Therefore, life in the post-pandemic 'new normal' will be strongly technology-dependent, yet offer a flexible way of living. Since I am in the education field, I believe blended or hybrid learning approach seems to be suited for the new norm in education.

The e-learning framework that I developed in 2001 (http://badrulkhan.com/framework/) is still well-suited for designing learning materials in the new normal, both for online and blended learning. The New Normal Learning Framework has characteristics added to the original e-learning framework (2001) to make it more adoptable and adjustable to the new horizon of education in this everchanging world.



In the NNL Framework, the inner octagon represents the characteristics of the new normal learning environment while the outer octagon represents the guiding elements to help the design of the learning environment. For example, in the new normal, learners will require learning environments with characteristics *as interactive/engaging, device independent, usable/accessible, single objective focused, short duration, retention boosting/just-in-time, independent but part of the whole,* and *cost effective*. The NNL Framework provides proper

guidance to design such environments. The following graphic presents the NNL framework with its octagonal dimensions of guidance for the new normal in education.



Let me explain each characteristic of the New Normal.

The new normal learning environment should be designed with such characteristics in mind so that learning materials can be distributed and flexible.

Interactive/Engaging. Interactivity keeps learners engaged in learning with appropriate immediate feedback.

Device Independent. In the digital world learning materials and experiences should be designed to work across multiple devices and platforms (e.g., smartphones, tablets, and laptops) to take advantage of the tools available to learners.

Usable/Accessible. Learning materials should be designed in the most efficient way so all learners, including individuals with disabilities, can easily access and use them. Navigation should be intuitive and consistent throughout.

Single Objective. Learning experiences should be broken up into focused, single objective lessons with measurable outcomes to boost knowledge transfer and retention and keep learners focused.

Short Duration. In the digital world, learners' attention spans are becoming shorter, therefore, microlearning or learning in snippets of short duration are more attractive to learners.

Retention Boosting/Just-in-Time. Delivering content meaningfully in bite-sized chunks reduces information overload, improves attention span, increases motivation and engagement. Learners can gain important knowledge quickly, at the moment of need, thereby, boost knowledge retention.

Independent/Part of the Whole. Standalone bite-sized learning snippets can be developed to be consumed independently, but systemically; they are part of a whole (i.e. part of a larger instructional unit). Therefore, when developing independent learning objects, consistent navigation and resources should be considered.

Cost Effective. During this period of rapid digital transformation, various new and emerging learning technologies are becoming available to make it easier to create cost effective, meaningful, flexible, distributed learning materials.

How do we design such learning environments for today's learners?

In 2001, I proposed the use of the *E-Learning Framework* to analyze the eight dimensions of an organization's training/learning culture (pedagogical, technological, interface design, evaluation, management, resource support, ethical, and institutional). The framework allows stakeholders to review an organization's existing learning environment from the perspective of what works, what doesn't, and recommend various cost-effective, efficient and meaningful training/instructional solutions based on the organizational mission and strategy. In this context, the framework serves as a refining filter for identifying training/instructional solutions. Guided by the framework, organizations can design, develop, evaluate and implement effective learning units with appropriate instructional strategies and delivery methods. By integrating instructional strategies with appropriate delivery mechanisms, organizations can achieve better results and a higher return on investment.

The **institutional dimension** addresses issues pertaining to administrative, academic, and learner support services. This dimension focuses on how the organization can disseminate knowledge and learning resources to workers that is timeline and cost effective.

The **pedagogical** dimension addresses issues pertaining to teaching and learning, in particular, how instructional content is designed, delivered, and implemented, with an emphasis on the identification of learners' needs and how the learning objectives will be achieved. The pedagogical dimension addresses issues related to practices involving learning design, development, implementation, and evaluation.

The **technological** dimension is concerned with the learning environment, its creation, and the tools required to create and deliver the learning. This dimension also addresses hardware and software requirements, as well as infrastructure planning, including the selection of the most suitable delivery system for achieving the institution's learning goals. Technical requirements such as the server capacities, bandwidth, security, backups, and other infrastructure issues are also addressed.

The **interface design** dimension is concerned with factors related to the overall look and feel of the learning environment. With regard to learning, the interface design dimension addresses issues related to user interface design, ease-of use, usability, navigability, and adaptiveness of learning objects for mobile learning.

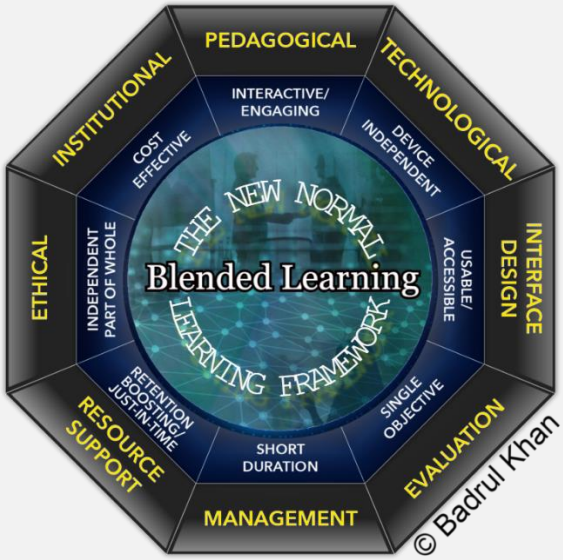
The **evaluation** dimension addresses the assessment of learners; evaluation of the instruction and learning environment; assessment of content development processes and of the persons involved in the design process (i.e., the planning, design, production, and evaluation teams); review of instructional design processes (i.e., planning, design, development, and evaluation); and evaluation of e-learning at the program and institutional levels.

The **management** dimension deals with issues related to the management of the learning program, such as the continuation, updating, and upkeep of the learning environment. The management dimension can address issues related to quality control, budgeting, staffing, security, and scheduling of learning programs.

The **resource support** dimension considers all of the technical and human resource support systems required to create and support meaningful online learning experiences. Examples include Web-based and telephone technical support, counseling support, as well as access to digital libraries, online tutorials, podcasts, glossaries, and Frequently Asked Questions (FAQs).

The **ethical dimension** identifies the ethical issues that need to be addressed in design, development, and implementation of e-learning resources. Issues pertaining to social and political influence, diversity, geographical diversity, bias, the digital divide, information accessibility, and etiquette are addressed. Legal issues address privacy, plagiarism, and copyright.

A Framework for Meaningful Learning



In the NNL Framework above, the inner octagon represents the characteristics (e.g., interactive, single objective-focused, short duration, etc.) of the new normal learning environment while the outer octagon represents the guiding elements (e.g., pedagogical, technological, ethical considerations, etc.) to help the design of the learning environment.

> The purpose of the framework is to help you think through every aspect of what you are doing during the steps of the e-learning and blended learning design process.

BadrulKhan.com/framework

INSTITUTIONAL

Administrative Affairs
- *Learning Analytics*
- *Cryptocurrency*

Academic Affairs
- *Academic Integrity*
- *Microcredentialing*

Student Services
- *Mental Health Issues*

PEDAGOGICAL

Content Analysis
Audience Analysis
Goal Analysis
Design Approach
- *Microlearning*
- *Adaptive Learning*
- *Augmented Reality (AR)*
- *Virtual Reality (VR)*
- *Metaverse*

Instructional Strategies
Organization
Blending Strategies

TECHNOLOGICAL

Infrastructure Planning
- *Cybersecurity*
- *AI - Artificial Intelligence*

Hardware
Software

INTERFACE DESIGN

Page and Site Design
Content Design
Navigation
Accessibility
Usability Testing

EVALUATION

Evaluation of Content Development
Evaluation of Learning Environment
Program & Institutional Levels Evaluation

Assessment of Learners
- Adaptive Testing (*AI - Artificial Intelligence*)

MANAGEMENT

People, Process and Product (P3) Continuum
Management Team
Time Management Strategies
Managing E-Learning Content Development
Managing E-Learning Environment

RESOURCE SUPPORT

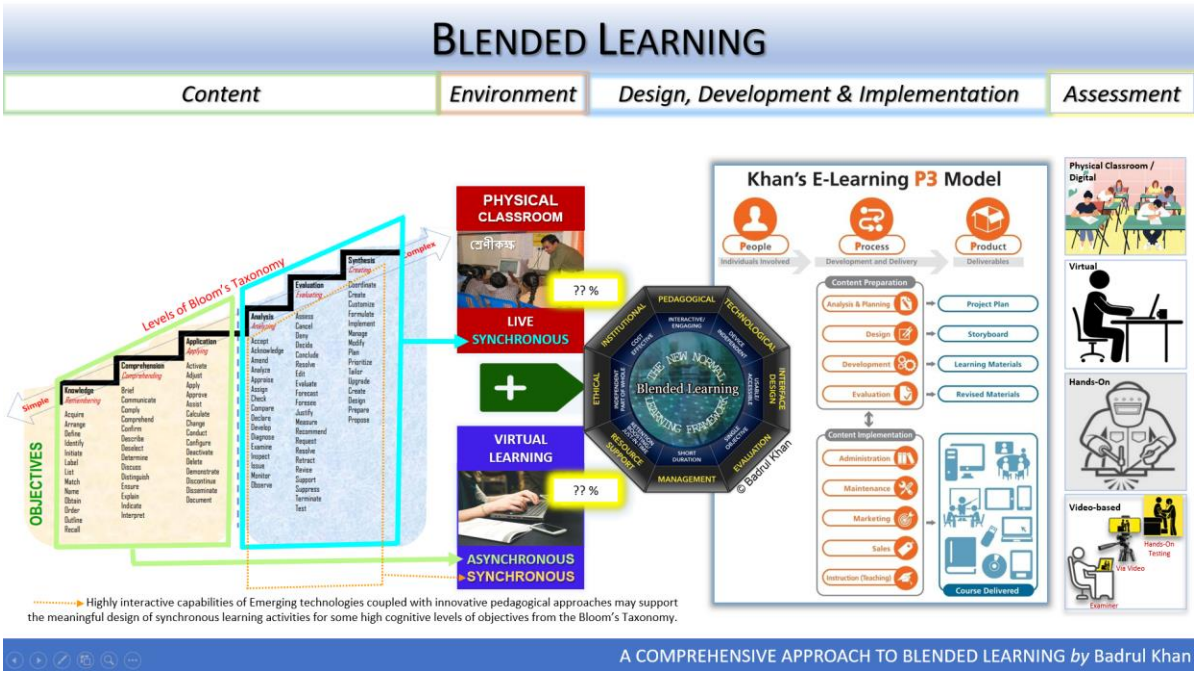
Online Support (Technical & Counselling)
Resources (Library & Learning Support)
- *Open Educational Resources*

ETHICAL CONSIDERATIONS

Social and Cultural Diversity
Bias and Political Issues
Geographical Diversity
Learner Diversity
Digital Divide
Etiquette
Legal Issues

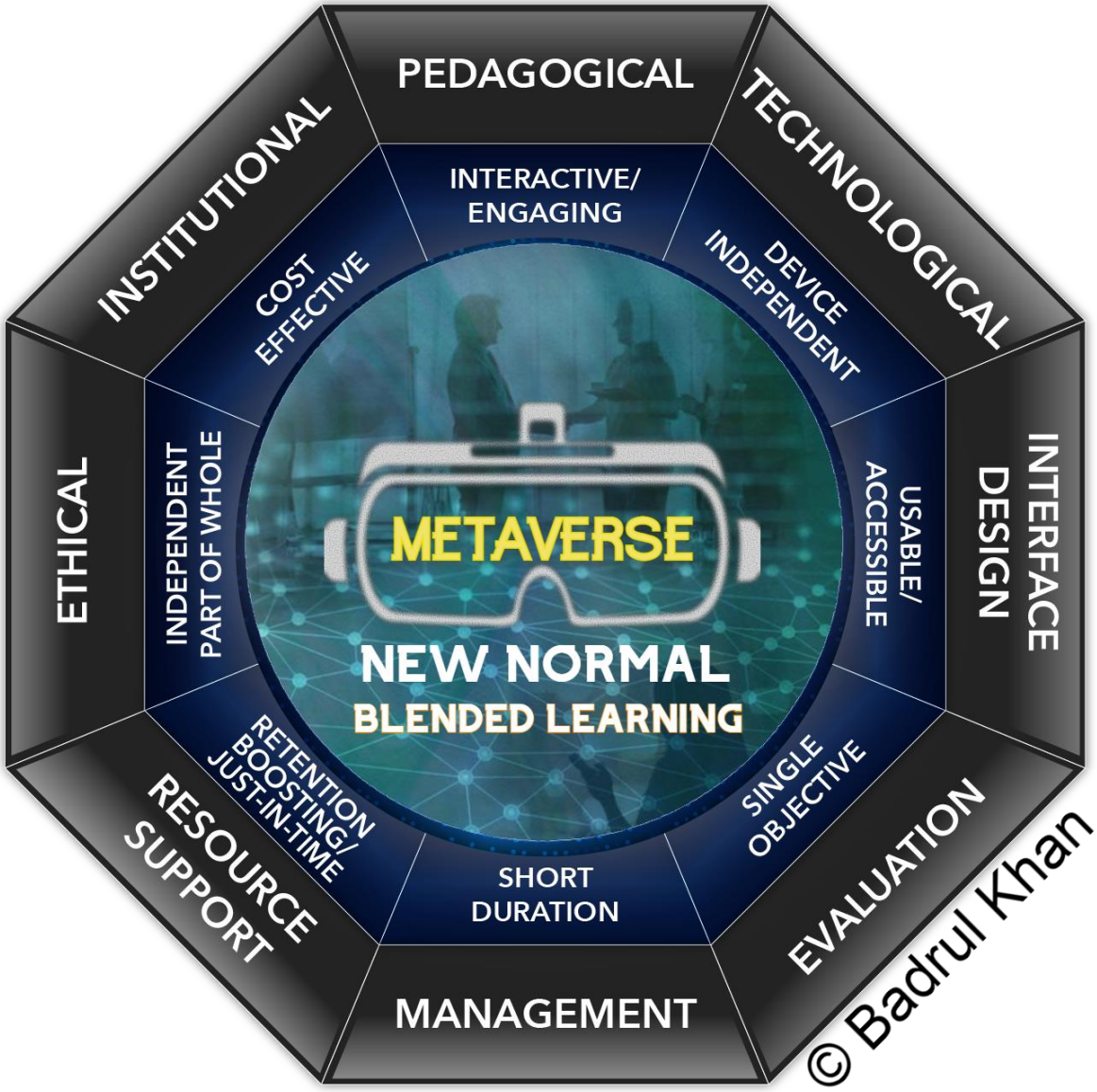
Comprehensive Approach to Blended Learning

I developed a Comprehensive Approach to Blended Learning that delineates which content types are most appropriate for the physical classroom and the online learning *environment or context;* how to meaningfully *design, develop, and implement* learning materials using the NNL framework during every stage of Khan's P3 process model (https://elearningindustry.com/continuum-in-e-learning-people-process-and-product-p3); and finally, how to assess the learning in different formats depending on learning tasks, e.g., in the physical classroom, virtual, hands-on/lab and video based. With the guidance from Bloom's Taxonomy (https://youtu.be/_LPska9No14), we can select content appropriate for online learning and traditional classroom instruction, and then meaningfully combine/blend them for meaningful learning and assessment in the new normal.



Metaverse

As I previously mentioned, digital transformation is increasingly becoming an essential component of the new normal in the post-pandemic world and with the development of Virtual Reality (VR) and Augmented Reality (AR), we are on the brink of a new era of digital integration. Now-a-days, we often hear the term, the metaverse. It is all over social media and a hot issue on TV programs. We may want to consider the Metaverse as the next evolution of the Internet and will change how we teach, learn, and live in the new normal.



For the Metaverse to be meaningful in learning we should address issues concerning the various dimensions of the framework. For example, mental health Issues (*institutional),* lack of moderation (*pedagogical*), bandwidth *(technological*), cross cultural communication *(interface design*), learner performance measures (*evaluation),* metaverse development cost and time (*management*), technical support in metaverse (*resource support*), and trust and distrust, the digital divide and information inequalities *(ethical considerations).*

I believe if educational resources in the metaverse are developed with sound learning goals and appropriate instructional strategies, they have the potential to create educational experiences that are otherwise impossible in a traditional environment.

I envision, all participating entities in the digital world will have their own unique digital identities. For example, I am Badrul Khan, a citizen of the United States of America in the physical world, but in the digital world, I can be a global virtual citizen. My virtual identity will encompass how I behave, appear, and represent myself digitally, with all metatags associated with me. In the physical world, I must adhere to the laws of the US government, but in the digital world I may have to follow the emerging combined laws of various countries, or my virtual citizenry may be governed by decentralized governance. It is a paradigm shift for sure, but are we ready for this digital transformation in the new normal? Accordingly, seismic digital innovations such as metaverse will have implications in our daily lives including how we learn and how we live!

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